PLANNING COMMISSION MEETING AGENDA
April 7, 2022 THURSDAY 6:00 P.M.

Location: Kalamazoo Charter Township Hall, 1720 Riverview Drive, Kalamazoo, MI 49004

AGENDA:

#1 Call to Order

#2 Roll call and recognition of visitors

#3 Approval of the agenda for the April 7, 2022 meeting.

#4 Approval of the minutes for March 3, 2022 regularly scheduled meeting.

#5 Public Comment (3-minute limit)

#6 Scheduled Reviews: None.

#7 Public Hearings:

7a. 521 E. Mosel, Cloud Cannabis, Class C Adult Use License, Special Land Use

#8 New Business:

8a. 521 E. Mosel, Cloud Cannabis, Site Plan Review

8b. 1838 Nazareth Road, Consumers Energy, Site Plan Review

#9 Old Business: None.

#10 Open Discussion

10a. Members of the Audience

#11 COMMUNICATIONS

#12 REPORT OF THE TOWNSHIP BOARD REPRESENTATIVE.

#13 REPORT OF THE TOWNSHIP ZBA REPRESENTATIVE.

#14 COMMENTS FROM PLANNING COMMISSION MEMBERS.

#15 REPORT OF THE PLANNER.

- Home Occupation Ordinance
- Marijuana facility fencing requirements

#16 REPORT OF THE ZONING ADMINISTRATOR.

#17 REPORT OF THE TOWNSHIP ATTORNEY.

#18 ADJOURNMENT.

The public may attend this meeting for your information and comments. Please contact the Planning & Zoning Department if you have any questions at (269) 381-8085.

Charter Township of Kalamazoo
Minutes of a Planning Commission Regular Meeting
Held on March 3, 2022

A regular meeting of the Kalamazoo Charter Township Planning Commission was conducted on March 3, 2022, commencing at 6:00 p.m. at the Kalamazoo Charter Township Hall.

Present were:
William Chapman
Denise Hartsough
Christopher Mihelich
Fred Nagler, Chairman
Warren Cook
Steve Leuty
Pete Morrison

Absent was:

None.

Also present were Township Zoning Administrator Kyle Mucha, Township Manager Dexter Mitchell, and Township Attorney Seth Koches.

Call to Order

The Chairman called the meeting to order at 6:00 p.m.

Roll Call and Recognition of Visitors

Nagler welcomed those in attendance.

Approval of the Agenda for the March 3, 2022 Regular Planning Commission Meeting

The next item on the agenda was approval of the agenda for the March 3, 2022 Planning Commission meeting. The Commissioners received the meeting agenda in their packets.

Upon motion of Nagler, supported by Hartsough, and unanimous vote, the agenda was approved as presented.

Approval of the minutes for December 2, 2021 regular Planning Commission meeting.

A copy of the draft minutes of the December 2, 2021 regular Planning Commission meeting were provided to the Commissioners in the agenda packet. Hartsough recommended several revisions to the draft meeting minutes.

Upon motion of Nagler, supported by Hartsough, and unanimous vote, minutes of the December 2, 2021 regular Planning Commission meeting as revised.

Public Comment

None.

Scheduled Reviews.

None.

Public Hearings.

None.

New Business.

a. Election of Officers.

The next item on the agenda was election of Planning Commission officers for 2022. The Commission nominated Nagler to continue as Chairperson and Mihelich to continue as Recording Secretary for 2022. Leuty continues as the Planning Commission's *ex officio* member as he is the Township Board member who sits on the Planning Commission.

Upon motion of Leuty, supported by Morrison, and unanimous vote, Nagler was elected as Planning Commission Chairperson and Mihelich was elected Planning Commission Recording Secretary for 2022.

b. 2021 Planning Commission and ZBA Annual Report.

The next item on the agenda was discussion regarding the Township's 2021 Planning Commission and ZBA Annual Report, which was included in the Commissioners' agenda packets.

Upon motion of Hartsough, supported by Mihelich, and unanimous vote, the 2021 Planning Commission and ZBA Annual Report was transmitted to the Township Board of Trustees for review.

Old Business

None.

Open Discussion – Members of the Audience

None.

Communications

a. Presentation by Commissioner Peter Morrison .

Commissioner Morrison prepared a presentation to the Commissioners regarding marihuana. A copy of the presentation was provided to the Commissioners in their agenda packets. Morrison 's presentation provided background of how and when marihuana laws and regulations were adopted in Michigan. Morrison 's presentation also discussed marihuana potency, prevention and legal issues for consideration.

Morrison said that he extensively researched marihuana and the Township's ordinances regulating Medical Marihuana Facilities and Recreational [adult-use] Marihuana facilities as special land uses within the Township. Morrison also researched the number of licenses that were approved within the Township and their location. Morrison's presentation included a list of the current Michigan Marihuana Agency [MRA] licensed businesses within Kalamazoo Township, which included their names and addresses. Morrison 's presentation included a map of the Township depicting zoning restrictions and various buffer-zones.

Morrison discussed a memorandum prepared by the Michigan Prevention Association's White Paper on the Impact of Commercial Marihuana on Youth and Communities, dated, November 20, 2019. A copy to this report was included in Morrison 's presentation materials.

Morrison said that the MRA concluded that there has been a significant increase in marihuana potency over time. Morrison researched this issue, noting that marihuana cultivated today is potentially 3-7 times stronger than marihuana cultivated thirty years ago. Morrison also discussed the MRA, it's role and changes/updates made to administrative rules. Morrison's presentation indicated that some samples of marihuana extracts have an 80% - 90% THC level. Morrison discussed an advisory bulletin that was issued by the MRA on November 25, 2019. The bulletin discussed THC levels for various marijuana edibles and THC levels per dose for medical marijuana and recreational [adult use] marihuana. Morrison 's presentation also included the MRA's bulletin titled "Purchasing Limits for Medical and Adult-Use Marijuana Facilities, which he summarized.

Morrison discussed Article 8.VV.i.h of the Township Zoning Ordinance, titled, "Annual Review and Recission." Morrison noted that the Township Zoning Ordinance authorizes the Planning Commission to impose conditions and safeguards as it deems necessary to protect the health, safety and general welfare of the township and residents. Morrison recommended that the Township Board and Township Legal Counsel discuss potential amendments to the Ordinance. Morrison also discussed whether it is possible to regulate the THC levels/marihuana potency through an ordinance. Morrison appreciated the Commissioner's listening to his presentation.

Hartsough discussed whether it is appropriate for the Planning Commission to review requirements that are set by state law. Morrison said that he lived in San Diego where there

were relaxed laws regulating the use of marihuana. Morrison expressed concern regarding marihuana use around children, noting that this is a public safety issue. Morrison discussed examples of where he observed marihuana used around children within Kalamazoo County. Leuty discussed potency noting gaps in state regulates this issue. Cook thanked Morrison for his presentation. Cook said that the Commission has a start on what may be done now given the law. Cook expressed concern for determining how potency labeling would work. Morrison appreciated the other Commissioner's comments and said that he supports anti-smoking/anti-drinking initiatives. Mihelich discussed planning and zoning issues, and said that potency issues are regulated by the state. Attorney Koches discussed state preemption laws and its applicability over Township Ordinances. Leuty supports Morrison's concerns and voicing them to the Planning Commission. Morrison said that he planned to contact the state to see what may be done. Hartsough said that she appreciated all of Morrison's work and his presentation, but feels that the Planning Commission cannot regulate potency. Manager Mitchell discussed the layout of the Township and location of the marihuana licenses. Mitchell discussed filters and odor control measures these businesses use to help mitigate some concerns from nearby property owners. The Commissioners thanked Morrison for his hard work and thorough presentation.

Report of Township Board Representative.

Leuty discussed the recent activity of the Township Board. Leuty discussed the Township's Climate Committee and the Township's approval of the non-motorized transportation plan, nothing that the Township spent $1.3 million on sidewalk repairs.

Report of the Zoning Board of Appeals Representative.

None.

Comments of Planning Commission Members.

Cook said that he was feeling better after some recent procedures. Chapman asked Commissioners for updates regarding a recent planning conference some members attended. Hartsough discussed changing a speed limit to a safe speed and expressed her concern regarding safety issues. Mihelich noted that it was good to be back to meeting in person and thanked Morrison for his presentation. Leuty discussed the County Road Commission and incorrectly painted shoulder lines on Nichols Road. Nagler said that it was good to be back to meeting in person.

Report of the Planner.

None.

Report of the Zoning Administrator.

Kyle Mucha discussed a master plan update, indicating that he will be sending out relevant information. Mucha also provided an update regarding the Home Occupation update and subsequent scope to revise the ordinance section. Mucha confirmed that the matter is still progressing and will provide the Commission more information as it becomes available.

Report of the Township Attorney.

None.

Adjournment

There being no further business to come before the Planning Commission, the Planning Commission meeting was adjourned at 8:20 p.m.

_____

, Secretary

7a. 521 E. Mosel, Cloud Cannabis, Class C Adult Use License, Special Land Use

MCKENNA

Memorandum

TO: Kalamazoo Charter Township Planning Commission

FROM: Paul Lippens, AICP, Vice President
Danielle Bouchard, Senior Planner

SUBJECT: **521 E. Mosel – Special Land Use Change of Use**

DATE: March 21, 2022

The applicant, Pinebrook Warren LLC, is requesting a public hearing and special land use approval for a change of use. Currently, operations located at 521 E. Mosel include the growing and processing of marihuana for adult use purposes. This particular property has received several approvals from the Planning Commission over the years. These include:

- Approval for a medical marihuana provisioning center, grow facility, and future processing facility in July 2018.
- Approval of an adult use marihuana retail center to be added to the existing medical marihuana provisioning center, grow facility, and future processing facility in May 2020.
- Approval of an adult use and medical marihuana processing facility to the existing medical marihuana provisioning center, grow facility, and retail center in February 2021.

CURRENT OPERATIONS

The subject site is approved for the following operations:

- A Class C (maximum of 2,000 plants) adult use marihuana growing facility (approximately 12,987 square feet).
- A Class C (maximum 1,500 plants) medical marihuana growing facility.
- An adult use retail marihuana facility (approximately 3,715 square feet).
- Warehousing space, not utilized for growing, provisioning, or retail. The intent is to apply for a future approval from the Planning Commission for processing.

SUMMARYOF REQUEST

The applicant is requesting to add a Class C License to grow marihuana intended for adult use. Currently, the subject site is approved for a Class C adult use, maximum of 2,000 plants, growing and retail facility. Additionally, the subject site is approved for a Class C medical growing facility, with a maximum of 1,500 plants.

If approved, the applicant would be permitted to have up to 5,500 plants on-site.

According to the State of Michigan, adding another Class C License would permit up to 2,000 plants on the site. Section 26.03.8.b, Modification to Approved Special Land Use, notes the following:

a. Modifications that do not change the nature of the use or that do not affect the intensity of use may be reviewed and approved following normal site plan review procedures described in Section 26.02. In evaluating change in intensity of use, the Planning Commission and Township Board shall consider the extent of increase of vehicular or pedestrian traffic, the change in demand for public services, extent to which the total floor area occupied by the proposed use will increase, increased demand for parking, off-site impacts from noise, fumes, drainage, etc., and similar considerations.

b. Modifications that change the nature of the use or that result in an increase in the intensity of the use shall be reviewed in the same manner as a new special land use proposal, following the procedures in this Section.

The proposed change of use, adding an additional 2,000 plants to the site intended for adult use marihuana grow operations, requires a new special land use approval, given the increased intensity of the use. Section 26.03.B, Procedures and Requirements for special land uses, states:

Special land use proposals shall be reviewed in accordance with the procedures in Section 26.02 for site plan review

The applicant has submitted a site plan depicting the proposed changes to the site as a result of the added use and increased intensity of the use for the Planning Commission's consideration.

STANDARDS FOR GRANTING SPECIAL LAND USE APPROVAL

Section 26.03.C of the Township Zoning Ordinance outlines the standards for granting special land use approval. Those standards are as follows.

1. *Compatibility with Adjacent Uses*

   The proposed special land use shall be designed, constructed, operated and maintained to be compatible with uses on surrounding land. The site design of the proposed special land use shall minimize the impact of site activity on surrounding properties. In determining whether this requirement has been met, consideration shall be given to:

   a. *The location and screening of vehicular circulation and parking areas in relation to surrounding development*.
   Currently, the site includes a parking area located on the front and rear of the site. The site includes 80 parking spaces in total, whereas 73 parking spaces are required. Parking calculations noted on site plans include the following details:
      - General retail sales use: 1 space/200 sq. ft. useable floor area (2,064 UFA / 200) = 13 spaces required. 13 spaces have been provided, 10 in the front of the building and 3 in the rear of the building.
      - Warehouse use: 1 space/1,000 sq. ft. gross floor area (59,200 GDA/1,000) = 60 spaces required. 13 spaces in the front of the building (west side) and 54 spaces in the rear of the building.

   To access the rear parking area, a vehicle would utilize a driveway located on the west portion of the site, which is approximately 26 feet wide. Further, site plans note that the west driveway will be blocked off by a gate.

The applicant has provided the number of employees during the largest working shift as to confirm compliance with employee parking standards. The largest shift will include 40 employees at one time on the site. Therefore, it is likely that 60 parking spaces intended for employees is adequate for the proposed use.

In general, the site driveway and parking areas appear to be adequately screened from surrounding properties. Additionally, we note that the perimeter of the subject site is lined with mature trees to further the separation from the subject site to neighboring properties.

b. *The location and screening of outdoor storage, outdoor activity or work areas, and mechanical equipment in relation to surrounding development.*
No outdoor storage of materials or equipment is proposed. No outside storage of materials is permitted on the site. The proposed location of all outdoor mechanical equipment and work areas are compatible with the proposed use and surrounding development.

c. *The hours of operation of the proposed use. Approval of a special land use may be conditioned upon operation within specified hours considered appropriate to ensure minimal impact on surrounding uses.*
The retail component on the site is 9am-9pm Monday through Friday and 10am-8pm on Sundays. For the growing component on site, the applicant has noted that the core hours are from 6:00am – 4:30pm with a swing shift from 2:00pm to 10:30pm. We note that the hours of operation are not intended to change from the current hours of operation since the site's approvals in 2018, 2020, and 2021. The Township has not received complaints regarding hours of operation on the site.

d. *The bulk, placement, and materials of construction of the proposed use in relation to surrounding uses.*
The bulk, placement, and materials of construction of the proposed use are not anticipated to cause any adverse effects to the surrounding uses.

e. *Proposed landscaping and other site amenities. Additional landscaping over and above the requirements of this Ordinance may be required as a condition of approval of a special land use.*
Site plans note approximately 13 trees on site, located on the front of the building, facing E. Mosel Avenue. Additionally, the site includes approximately 90 shrubs/bushes on the front of the site fronting E. Mosel Avenue. As previously mentioned, the site's west, east, and north perimeter include mature trees separating the building from adjacent properties. It is not likely that additional landscaping will be necessary as a result of the addition of the proposed Class C adult use grow license.

2. *Compatibility with the Master Plan*

The proposed special land use shall be consistent with the general principles and objectives of the Township's Master Plan.

The subject site and surrounding sites are zoned and planned for general industrial uses.

3. *Public Services*

The proposed special land use shall be located so as to be adequately served by essential public facilities and services, such as highways, roads, police and fire protection, drainage systems, water and sewage facilities, and schools, unless the proposal contains an acceptable plan for providing necessary services or evidence that such services will be available by the time the special land use is established.

The subject site is adequately served by public utilities intended for the proposed use to accommodate the growing of marihuana plants (currently, the site permits up to 3,500 plants). We note that the applicant plans to utilize the same amount of space for the plants as previously approved, but with smaller pots and a higher turnover rate, resulting in the maturation of more plants for less time. Further, the applicant has previously obtained all necessary utility hookup and approvals for site operations including water, sewer, electrical, telephone, and storm drain. On-site water utilities includes the following details:

"Water is provided by a new 6-inch from the City of Kalamazoo water main in Mosel Street. The existing 6-inch ductile unmetered fire water line and the existing 2-inch metered domestic water line remain. Fire hydrant service in the parking lot is connected directly to the existing 6-inch fire water line. The domestic water demand for the facility is estimated at 80 gpm. The fire service demand for the facility is estimated to be 1200 gpm at 65 psi. This service is not metered but will have backflow prevention."

It is not anticipated that the additional Class C license will cause adverse effects on Township utilities and/or public facilities.

4. *Impact of Traffic*

The location of the proposed special land use within the zoning district shall minimize the impact of the traffic generated by the proposed use. In determining whether this requirement has been met, consideration shall be given to the following:

a. *Proximity and access to major thoroughfares.*
The site currently has over 450 feet of frontage along E, Mosel Avenue. The proposed use is adequately served by major throughfares in the Township.

b. *Estimated traffic generated by the proposed use.*
The applicant must further describe the anticipated traffic generated by the proposed addition of 2,000 plants and quicker growing period. How many shipments per week or per grow cycle are being processed now? What is the anticipated marginal increase with the new license? How much waste is being generated now? When and how frequently is it being collected? What are the marginal impacts to waste products anticipated? Please provide a traffic impact statement for review by Planning Commission. Planning Commission may request an independent traffic analysis if warranted based on applicant responses.

c. *Proximity and relation to intersections.*
The site's driveway is located over 700 feet from the intersection, at N. Pitcher Street and E. Mosel Avenue and approximately 576 feet from the intersection at E. Mosel and Harrison Street. It is not likely the proposed use will cause any adverse effects to either intersection.

d. *Adequacy of driver sight distances.*

Driver site distances are adequately served on the site given the placement of the road frontage landscaping on either side of the driveways. Drivers are likely to easily see clearly in either direction.

e. *Location of and access to off-street parking.*
Off-street parking is located on the front and rear of the site. The site includes 80 parking spaces in total (23 in the front of the building and 57 on the rear of the building). The retail parking area includes 1 barrier free space and the rear parking lot includes 3 barrier free spaces.

f. *Required vehicular turning movements.*
The driveways on the west side of the site are approximately 50 feet wide. The driveway on the east side of the site (to access the retail store) is approximately 26 feet wide. We note that larger vehicles that will access the site will utilize the wider entrances on the west side of the site, where the retail entrance is intended for personal passenger vehicle traffic. It is not likely that the proposed addition of the Class C adult use grow license will affect vehicle turning movements or cause adverse effects on the site. As mentioned above, the applicant must provide more details on the impacts of increases in truck traffic, waste processing, employee and customer trips, or other traffic as a result of the additional 2,000 plants and grow license.

g. *Provisions for pedestrian traffic.*
A 5-foot-wide sidewalk is included on the site plans and exists on site. However, we note that bike parking is not included on the proposed site plans. A bike rack has also been added to site plans.

5. *Detrimental Effects*

The proposed special land use shall not involve any activities, processes, materials, equipment, or conditions of operation, and shall not be located or designed so as to be detrimental or hazardous to persons or property or to public health, safety, and welfare. In determining whether this requirement has been met, consideration shall be given to the level of traffic, noise, vibration, smoke, fumes, odors, dust, glare, and light.

It is not anticipated that the proposed use will cause adverse effects that cannot be mitigated through site design or operational limitations. The odor mitigation plan includes the following key elements:

- Activated carbon filtration systems
- Negative ion generators
- Merv 8 positive pressure filtration devices (remove airborne pathogens)
- Sealed cultivation room
- A dehumidification system to each cultivation room
- Humidity controls

6. *Economic Well-Being of the Community*

The proposed special land use shall not be detrimental to the economic well-being of those who will use the land, residents, businesses, landowners, and the community as a whole.

It is not anticipated that the proposed use will cause any adverse effects to the economic well-being of the community.

7. *Compatibility with Natural Environment*

   The proposed special land use shall be compatible with the natural environment and conserve natural resources and energy.

   The subject site and surrounding sites are all currently zoned and planned for industrial uses. This is compatible with the proposed use located at 521 E. Mosel Avenue.

SUPPLEMENTARY STANDARDS APPLICABLE TO ADULT USE MARIHUANA GROWING & PROCESSING FACILITIES

1. ***General regulations**: An Adult Use marijuana retailer, grower, processor, transporter, testing facility and/or microbusiness in accordance with the provisions of state law, may be permitted through the issuance of a special use permit pursuant to Article 26 Section 26.03 in the specified zone(s), provided that:*

   a. *Any uses or activities found by the state of Michigan or a court with jurisdiction to be unconstitutional or otherwise not permitted by state law may not be permitted by the Township. In the event that a court with jurisdiction declares some or all of this article invalid, then the Township may suspend the acceptance of applications for special use permits pending the resolution of the legal issue in question.*

      To date, the property has not received any violations from the Township or State for unlawful activities.

   b. *For a special use permit the Adult Use marijuana retailer, grower, processor, transporter, testing facility and/or microbusiness must be licensed by the State of Michigan and then must be at all times in compliance with the laws of the State of Michigan including but not limited to the Michigan Regulation and Taxation of Marijuana Act, Initiated Act 1 of 2018 (MCL 333.27951 – 333.27967 et seq.); and all other applicable rules promulgated by the State of Michigan.*

      The applicant has submitted a photo image of the approved current Class C License with the State of Michigan.

   c. *The use or facility must be at all times in compliance with all other applicable laws, codes and ordinances of the Township as well as the State of Michigan Fire Code as amended/updated, and the State Building Code. The provisions of the current NFPA-1 related to marijuana facilities are hereby incorporated by reference as if fully restated herein. NFPA 1 of 2018 is available at the office of the Township Fire Marshal and at the office of the Township Attorney for reference as may be necessary. The Township Fire Marshal shall review all applications for compliance with the current marijuana rules in the most recent NFPA-1 and any and all other applicable fire codes facilities rules.*

We defer to the Township Fire Marshal for comment on fire safety as it pertains to the proposed use and site design.

d. *The Township may suspend or revoke a special use permit based on a finding that the provisions of the special use standards in this section, all other applicable provisions of this zoning ordinance, and/or the terms of the special use permit and approved site plan are not met.*

The Planning Commission has not granted site plan approval at this time.

f. *An Adult Use marijuana retailer, grower, processor, transporter, testing facility and/or microbusiness, shall not be permitted as a home occupation, home-based business or accessory use nor may they include accessory uses except as otherwise provided in this ordinance.*

The applicant is not requesting the proposed operations as a home occupation or home-based business.

g. *Signage requirements for marijuana facilities, unless otherwise specified, are as provided in the Article 7.00 Signs.*

No signage details have been submitted as a component of the proposed special land use application. No sign shall be constructed on the site prior to review and approval by the Township Zoning Administrator.

2. ***Application and Approval**: After receiving the application for the grant of a special land use permit for Adult Use marijuana retailer, grower, processor, transporter, and/or testing facility, accompanied by the required plans, specifications and permit fees, the Planning Commission shall hold a public hearing and review the application following the procedures required for special land use uses set forth in Section 26.03.*

Following such hearing, said Planning Commission shall grant or deny the application and set forth its reasons for its decision.

a. ***Annual Review and Rescission**. In making any decision, the Planning Commission shall have the right and authority to impose such additional conditions and safeguards as it deems necessary for the protection of the health, safety and general welfare of the neighborhood and of the adjoining residents and property owners. The Planning Commission shall provide for a periodic review of the proposed operations to ascertain compliance with the conditions and limitations imposed upon the same. It shall be empowered to renew or extend a special land use permit where all standards and conditions are complied with and may revoke or refuse to renew a permit where noncompliance exists. No permit shall be revoked or not renewed until the operator has been given written notice of any violation forming the basis of such revocation or denial of renewal and not less than thirty (30) days have elapsed to correct the said violation. All permits shall be reviewed by the Planning Commission annually.*

The operator shall be required to pay an annual fee to cover the cost of inspections and additional meetings of the Planning Commission as may be established by the Township Board.

The Planning Commission, along with Township Staff, may conduct a periodic review of the site.

b. ***Liability Insurance**. All operators shall be required to carry personal injury and property damage insurance while the Adult Use marijuana facility exists, in the amount of not less than $1,000,000.00 (one million dollars) for each person or property injured or damaged and not less than $2,000,000.00 (two million dollars) for injury or damage to more than one person or one person's property arising out of one occurrence. Such insurance shall cover injury or damage occurring upon the site of the operations as well as upon properties adjoining thereto, as a result of conditions or activities existing upon the site. The policy of insurance provided herewith shall name the Township as an additional insured. A copy of the policy shall be filed with the Township Clerk.*

The Township has received file of the applicant's liability insurance.

3. *Adult Use Marijuana Grower, Processor, Transporter, and/or Testing Facility shall be subject to the following standards:*
   a. ***Location.** A building occupied by an Adult Use Marijuana Grower, Processor, Transporter, Testing Facility, and/or Microbusiness may be permitted to operate at a location shared with a Medical Marijuana facility.*

   The current operations include a Class C Adult Use Grow License and a Class C Medical Grow License. This satisfies Ordinance requirements.

   b. ***Indoor Activities**. All activities of an Adult Use Marijuana facility, including all transfers of marijuana, shall be conducted within the structure and out of public view. Lighting within a building used for growing Adult Use marijuana shall not be visible outside of the building.*

   All activities are conducted within an enclosed building. This satisfies Ordinance requirements.

   c. ***Other Activities**. Marijuana and tobacco products shall not be smoked, ingested, or otherwise consumed in the building space occupied by the Adult Use Marijuana business.*

   No evidence suggests that marihuana or tobacco products are smoked, ingested, or otherwise consumed in the building. Ordinance requirements are satisfied.

   d. ***Physical Appearance**. The exterior appearance of the structure shall remain compatible with the exterior appearance of structures already constructed or under construction within the immediate area, and shall be maintained so as to prevent blight or deterioration or substantial diminishment or impairment of property values within the immediate area.*

   Given the general industrial nature of the building and surrounding E. Mosel corridor, the physical appearance of the building located at 521 E. Mosel is compatible with the immediate area.

e. ***Buffer Zones***.

(i). An Adult Use marijuana business shall not be located within a 1,000-foot radius of a pre-existing:

(1) Property occupied by a public or private elementary, or secondary school building providing education in kindergarten or any of grades 1 through 12; NOTE: Does not include home schools.

(2) Public library.

(ii). An Adult Use marijuana business shall not be located within a 500-foot radius of any property occupied by:

(1) A public playground;

(2) A public park;

(3) Public housing;

(4) A religious institution;

(5) A public or private, vocational school, college, junior college, or university;

(6) A state licensed child care center or preschool;

(7) Any public swimming pool, public or private youth activity facility, public outdoor recreation area (except trails), or public recreation facility;

(8) A youth center;

(9) A juvenile or adult half-way house;

(10) Correctional facility or rehab center;

(11) Property zoned R-1, R-2, RM-1, RM-2, RM-3, or MHP.

The subject site is in compliance with all buffer zone requirements and standards.

f. ***Odor***. *It is the intent of this ordinance that no odor shall be detectable outside of any building where marijuana is present. As used in this subsection, building means the building, or portion thereof, used for marijuana growing, processing, testing, transport storage or sales.*

(i). The building shall be equipped with an activated carbon filtration system for odor control to ensure that air leaving the building through an exhaust vent first passes through an activated carbon filter.

(ii). The filtration system shall consist of one or more fans and activated carbon filters. At a minimum, the fan(s) shall be sized for cubic feet per minute (CFM) equivalent to the volume of the building (length multiplied by width multiplied by height) divided by three. The filter(s) shall be rated for the applicable CFM.

(iii). The filtration system shall be maintained in working order and shall be in use. The filters shall be changed a minimum of once every six (6) months or as manufacturer recommended.

(iv). Negative air pressure shall be maintained inside the building.

(v). Doors and windows shall remain closed, except for the minimum length of time needed to allow people to ingress or egress the building.

(vi). An alternative odor control system is permitted if the special use permit applicant submits and the municipality accepts a report by a mechanical engineer licensed in the State of Michigan demonstrating that the alternative system will control odor as well or better than the activated carbon filtration system otherwise required. The municipality may hire an outside expert at the applicant's expense to review the alternative system design and advice as to its comparability and whether in the opinion of the expert it should be accepted.

Please note odor mitigation details above.

g. ***Security Cameras**. If used, security cameras shall be directed to record only the subject property and may not be directed to public rights-of-way as applicable, except as required to comply with licensing requirements of the State of Michigan.*

The applicant has submitted security plans to the Township for review. The security plans depict 30 security cameras total (both inside and outside the building). Additionally, the site includes 16 alarm sensors. This security plan is likely adequate to serve the proposed use.

h. ***Waste Management Plan**. The applicant shall establish a waste management plan at a minimum in compliance with state regulations.*

Site plans note a trash compactor on the rear of the site (this portion of the site is only accessible by gate and key card access). Waste management plans include the following:

"All tools and equipment necessary for the day, such as cutting tools, scales, trash cans, bags, etc., are gathered only once, and any tools or equipment that are brought into any areas with pests, mold, or mildew, must be thoroughly sanitized before being taken into other areas of the facility. Before leaving any problem area, cultivation staff must discard their paper suits, shoe covers, and gloves, in a specific trash receptacle. Before these trash bags leave the problem areas, they must be, at the very least, twisted at the top, to close the opening and prevent any infectious materials from escaping the bag, and re-establishing themselves in the facility. All trash must be weighed, logged into the Discard Log and the POS, approved by the Cultivation Manager and discarded immediately. Trash will be removed into a clean holding area during the workday, and only moved from the holding area to the waste disposal area once entry to Flowering, Vegetative, Breeding, Trim or Cure Departments is no longer necessary."

Further, the applicant notes that all marihuana products that are destroyed or considered waste product will be rendered into an unusable and unrecognizable form and recoded into the Statewide monitoring system.

i. ***Safety Compliance Facilities**. A Safety Compliance Facility shall not be located in the same facility as nor under the same ownership as a marijuana: grower, processor, retailer or microbusiness.*

Ordinance requirements are satisfied.

j. ***Subsequent Construction****. If after a marijuana facility has been approved, a protected use is located within the buffer zone, that use does not gain protected use status from the existing marijuana facility and additional marijuana facilities may be located on the previously approved marijuana facility parcel.*
Ordinance requirements are satisfied.

4. Fencing and Screening:
Fencing shall be required unless the applicant demonstrates to the satisfaction of the planning commission that one or all sides of the property are secured from unwanted access by natural land contours, tree line, landscaping steep slopes, rocks or other existing conditions that will be retained; or that proposed improvements or security measures will be provided.

(i) A six-foot (6') tall security fence shall be required along all side and rear property lines and across the lot at the front building line in order to restrict access to the sides and rear of the building. Such fencing shall provide gates to allow emergency vehicle access.

Existing conditions show a chain link fence along the west perimeter of the site. However, we note that the east perimeter of the site does not include fencing, as this fencing requirement was implemented into Ordinance after the applicant received original site plan approval. We note that the mature trees located on the west side of the building can likely serve as a natural barrier to prevent unwanted access into the building. It appears the rear portion of the site is also protected by mature trees and fencing. However, there is a small portion of the building's east façade that is not protected by mature trees and is clearly accessible to those using the Kalamazoo River Valley Trail. This can be addressed during site plan review.

We defer to the Township Fire Marshal for comment on emergency vehicle access.

(ii) Any areas of outdoor grow including greenhouses, shall be screened from view from adjacent properties or public rights-of-way.

No outdoor greenhouses exist or are proposed on the site.

RECOMMENDATIONS

We recommend approval of the proposed special land use located at 521 E. Mosel for the addition of one Class C Adult Use Marihuana License (2,000 plants maximum) for the growing and processing of marihuana with the following conditions:

1. The applicant must further describe the anticipated traffic generated by the proposed addition of 2,000 plants and quicker growing period. How many shipments per week or per grow cycle are being processed now? What is the anticipated marginal increase with the new license? How much waste is being generated now? When and how frequently is it being collected? What are the marginal impacts to waste products anticipated? Please provide a traffic impact statement for review by Planning Commission. Planning Commission may request an independent traffic analysis if warranted based on applicant responses.

2. The applicant complies with all review requirements as noted by the Township Fire Marshal and other applicable safety personnel.

3. The applicant received site plan approval by the Kalamazoo Township Planning Commission.

If you have any questions or would like additional information on this recommendation, please feel free to reach out to Paul Lippens, AICP, Vice President, at PLippens@mcka.com or Danielle Bouchard, Senior Planner, at DBouchard@mcka.com.

Respectfully Submitted,
McKenna

Paul Lippens, AICP
Vice President

Danielle Bouchard
Senior Planner

8a. 521 E. Mosel, Cloud Cannabis, Site Plan Review

MCKENNA

Memorandum

TO: Kalamazoo Charter Township Planning Commission

FROM: Paul Lippens, AICP, Vice President
Danielle Bouchard, Senior Planner

SUBJECT: **521 E. Mosel – Site Plan Review #2**

DATE: March 21, 2022

The applicant, Pinebrook Warren LLC, is requesting a public hearing and special land use approval for a change of use. Currently, operations located at 521 E. Mosel include the growing and processing of marihuana for adult use purposes. This particular property has received several approvals from the Planning Commission over the years. These include:

- Approval for a medical marihuana provisioning center, grow facility, and future processing facility in July 2018.
- Approval of an adult use marihuana retail center to be added to the existing medical marihuana provisioning center, grow facility, and future processing facility in May 2020.
- Approval of an adult use and medical marihuana processing facility to the existing medical marihuana provisioning center, grow facility, and retail center in February 2021.

OPERATIONSAND APPROVALS

The subject site is approved for the following operations:

- A Class C (maximum of 2,000 plants) adult use marihuana growing facility (approximately 12,987 square feet – including the Class C medical plants as noted below).
- A Class C (maximum 1,500 plants) medical marihuana growing facility.
- An adult use retail marihuana facility (approximately 3,715 square feet).
- Approximately 12,240 square feet of warehousing space, not utilized for growing, provisioning, or retail. The intent is to apply for a future approval from the Planning Commission for processing.

Provided that the special land use request was approved by the Planning Commission, the subject site is permitted a maximum of 5,500 plants.

SUMMARY OF REQUEST

The applicant is requesting to add a Class C License to grow marihuana intended for adult use. Currently, the subject site is approved for a Class C adult use, maximum of 2,000 plants, growing and retail facility. Additionally, the subject site is approved for a Class C medical growing facility, with a maximum of 1,500 plants.

An adult use marijuana grower (subject to Article 8, Section 8.02 WW 4) and processor are permitted uses in the I-2 District, subject to special land use approval and requires a new site plan approval.

EXISTING CONDITIONS AND SURROUNDING ZONING DISTRICTS

The subject site is located on the north side of E. Mosel Avenue, just west of N. Pitcher Street and east of Harrison Street. The property is currently zoned I-2, General Industrial. All surrounding properties to the subject site are also zoned I-2, General Industrial. The lot size is approximately 5.6 acres in size with approximately 452 feet of frontage on E. Mosel Avenue.

Current site improvements include one industrial building for the use of growing and retail sale of cannabis for medicinal and adult use purposes.

SITE PLAN REVIEW

1. **Schedule of Regulations: Section 25.02**
   Please note that the site conditions in regards to the schedule of regulations for the existing building were previously approved by the Planning Commission prior to this review in 2018.

Regulation Type	I-2, General Industrial District Requirements	521 E. Mosel Conditions	Compliance with Ordinance Standards
Minimum Lot Area	43,560 sq. ft.	243,936 sq. ft.	Yes
Minimum Lot Width	150 ft.	450 ft.	Yes
Maximum Stories	2	1	Yes
Maximum Building Height	30 ft.	27 ft.	Yes
Front Yard Setback	50 ft.	~77 ft.	Yes
Side Yard Setback	30 ft. (each)	0 ft. (east) ~43 ft. (west)	No Yes
Rear Yard Setback	50 ft.	~248 ft.	Yes
Maximum Building Height	30 ft.	27 ft.	Yes
Maximum Lot Coverage	75%	29%	Yes

2. **Off-Street Parking: Section 4.01**
   Parking requirements in Section 4.01.D.6. describe the number of spaces needed for an industrial use. According to Ordinance standards, the following parking is required:

   - 1 space per every 750 sq. ft. of GFA for a warehouse = 60 spaces
   - 1 space per ever 200 sq. ft. of GFA for retail sales = 13 spaces
   - A total of 73 spaces are required

   Site plans note 80 total parking spaces (23 in the front of the building and 57 in the rear of the building) 4 of the 80 spaces are barrier free. This complies with Ordinance requirements.

   Additionally, Section 4.01 (D) (8) E.2 requires a minimum drive aisle width of 27 feet near the rear driveway and 28 feet in the rear parking lot. Drive aisle widths of the front parking lot are not depicted on site plans.

However, we note that it is likely that the parking lot widths are adequate given the Planning Commission's previous approval of the site. Each parking stall is 18 feet deep by 9 feet wide, also in compliance with Ordinance standards. Site plans also include a bike rack located in the front of the building, facing E. Mosel Avenue.

3. Landscaping: Article 5.00

1) Parking lot landscaping

The Ordinance requires 30 square feet of interior landscaping per parking space for any lot having more than 10 parking spaces. Therefore, approximately 1,710 square feet of interior landscaping is required for the rear parking lot and approximately 390 square feet of interior parking lot landscaping is required in the front parking lot. The existing building has decorative shrubs and other landscaping elements in the front of the building. The rear parking area does not show interior landscaping. However, we understand that the Planning Commission approved the site's landscaping plan previously, so it is likely the existing conditions are adequate for the proposed use. The landscaping is not proposed to change from its current state as a result of the new Class C Adult Use Grow License.

2) General Site Landscaping

Section 5.02 of the Ordinance notes the following:
"A mixture of evergreen and deciduous trees shall be planted on non-residential parcels at the rate of one (1) tree per 3,000 square feet or portion thereof of any unpaved open area…"
The western portion of the site includes a wooded area with multiple trees. Site Plans note approximately 10 mature trees to remain on the west side of the site. In the rear portion of the site, approximately 36 mature trees. The site also includes smaller existing trees along the western and northern property line, including brush. The existing mature trees and wooded nature of the unpaved and undeveloped portion of the lot likely satisfied ordinance requirements.

3) Landscaping to Adjacent Roads

The site has approximately 450 feet of frontage on E. Mosel Avenue, with three driveways. A 45-foot-wide driveway, a 45-foot driveway, and a 26-foot-wide driveway (450-45-45-26 = 334 feet of road frontage on E. Mosel Avenue).

1 shade tree/evergreen per 40 ft. of frontage:	8 trees required	8 shown
1 ornamental tree per 100 ft. of frontage:	4 trees required	4 shown
8 shrubs per 40 ft. of frontage:	64 shrubs required	90 shown

Landscaping requirements have been met.

4) Types of trees

Types of trees are not noted on site plans. However, we note that the applicant does not anticipate or propose to change the current landscaping conditions on site. Therefore, it is likely that the existing types of trees are adequate for the proposed use given the Planning Commission's previous approval.

5) Caliper

Tree caliper are not noted on site plans. However, we note that the applicant does not anticipate or propose to change the current landscaping conditions on site. Therefore, it is likely that the existing types of trees are adequate for the proposed use given the Planning Commission's previous approval.

4. **Lighting: Section 2.12**
Lighting plans have been submitted to the Township for review. Parking lot light fixture details have been provided. There are a total of 4 pole parking lot lights proposed on site (these poles may not exceed 22 feet in height). However, we note that areas to the north (rear) of the site and the south (front) of the site exceed the 0.5 footcandle maximum. Given that the site is generally surrounded by mature trees, it is likely that the proposed photometric plan will not cause adverse effects to surrounding properties. The applicant shall include a note on site plans stating, "In the event that the lighting on the north side of the building impacts the neighboring property, the Site owner will remove or replace the bulb with a complying fixture."

   All entrances and windows are fully illuminated during the hours of darkness to a minimum of 500 lux. Additionally, 1,000 lux motion activated lighting illuminate exterior doors and windows. All other areas around the Facility are illuminated at all times to the minimum necessary to facilitate video surveillance.

   The applicant shall provide wall mounted light fixture details to the Township to ensure compliance with Township standards, if applicable.

5. **Security: Section 8.02.WW**
Plans do not depict any security cameras on-site. If security cameras are proposed, they must be shown on site plans. The applicant has submitted proof of insurance for file.

6. **Fencing: Section 8.02.WW**
Fencing shall be required unless the applicant demonstrates to the satisfaction of the planning commission that one or all sides of the property need are secured from unwanted access by natural land contours, tree line, landscaping steep slopes, rocks or other existing conditions that will be retained.
   i. *A six-foot (6') tall security fence shall be required along all side and rear property lines and across the lot at the front building line in order to restrict access to the sides and rear of the building. Such fencing shall provide gates to allow emergency vehicle access.*
   ii. *Any areas of outdoor grow including greenhouses, shall be screened from view from adjacent properties or public rights-of-way.*

   The adjacent property to the west has a fence along the property line this likely to satisfy Ordinance requirements. Further, we note that the west and rear portion of the site's current condition include heavily wooded areas with mature trees. This is also likely to provide sufficient screening on site. However, the building is highly visible and accessible from the Kalamazoo River Valley Trail on the west side. We note that fencing may be appropriate on this side of the building. We defer to the Township Fire Marshal for review and comment on emergency vehicle access.

7. **Odor Control: Section 8.02.WW**
Standards pertaining to odor control must comply with the following requirements:

   i. *The building shall be equipped with an activated carbon filtration system for odor control to ensure that air leaving the building through an exhaust vent first passes through an activated carbon filter.*

ii. *The filtration system shall consist of one or more fans and activated carbon filters. At a minimum, the fan(s) shall be sized for cubic feet per minute (CFM) equivalent to the volume of the building (length multiplied by width multiplied by height) divided by three. The filter(s) shall be rated for the applicable CFM.*

iii. *The filtration system shall be maintained in working order and shall be in use. The filters shall be changed a minimum of once every six (6) months or as manufacturer recommended.*

iv. *Negative air pressure shall be maintained inside the building.*

v. *Doors and windows shall remain closed, except for the minimum length of time needed to allow people to ingress or egress the building.*

vi. *An alternative odor control system is permitted if the special use permit applicant submits and the municipality accepts a report by a mechanical engineer licensed in the State of Michigan demonstrating that the alternative system will control odor as well or better than the activated carbon filtration system otherwise required. The municipality may hire an outside expert at the applicant's expense to review the alternative system design and advice as to its comparability and whether in the opinion of the expert it should be accepted.*

Odor mitigation plans have been submitted to the Township. The key components of the plans include the following:

- Activated carbon filtration systems
- Negative ion generators
- Merv 8 positive pressure filtration devices (remove airborne pathogens)
- Sealed cultivation room
- A dehumidification system to each cultivation room
- Humidity controls

It is not anticipated that odors from the site will cause adverse effects to surrounding properties.

8. Signage: Article 7.00

No signs are proposed as a part of this site plan review. A sign permit must be obtained from Kalamazoo Township prior to the construction of any new signs on the subject site.

9. Waste Management Plan: Section 8.02.WW & 2.22

Site plans note a trash compactor on the rear of the site (this portion of the site is only accessible by gate and key card access). Waste management plans include the following:

"All tools and equipment necessary for the day, such as cutting tools, scales, trash cans, bags, etc., are gathered only once, and any tools or equipment that are brought into any areas with pests, mold, or mildew, must be thoroughly sanitized before being taken into other areas of the facility. Before leaving any problem area, cultivation staff must discard their paper suits, shoe covers, and gloves, in a specific trash receptacle. Before these trash bags leave the problem areas, they must be, at the very least, twisted at the top, to close the opening and prevent any infectious materials from escaping the bag, and re-establishing themselves in the facility. All trash must be weighed, logged into the Discard Log and the POS, approved by the Cultivation Manager and discarded immediately. Trash will be removed into a clean holding area during the workday, and only moved from the holding area to the waste disposal area once entry to Flowering, Vegetative, Breeding, Trim or Cure Departments is no longer necessary.

Further, the applicant notes that all marihuana products that are destroyed or considered waste product will be rendered into an unusable and unrecognizable form and recoded into the Statewide monitoring system."

We note that the proposed waste removal plan is likely adequate for the proposed use given that the applicant will also comply with State requirements.

10. **Site Circulation: Section 2.18 & 2.20**
Site conditions include a sidewalk fronting E. Mosel Avenue. This satisfies Ordinance requirements.

11. **Safety**
Comments from the Township Fire Marshal include:

"By the submitted drawings it would appear as though there is not much of a change to this site. I did however notice that there is a proposed sliding cantilever gate on the west side of the building. At this point, I see no exception to this this gate as proposed as it relates to gate security, i.e. Knox Padlocks, key switches etc. I would caution on the sliding gate location in relation to the sliding barn style door on the southwest side of the building. If the sliding gate is in-fact installed, it shall not interfere with the operation of the barn door. Meaning that both doors shall operate unobstructed simultaneously."

Co2 tank is labeled on site plans. We defer to the Township Fire Marshal to determine the adequacy of the location and site plan labeling.

12. **Floorplan**
As previously noted above, the applicant is proposing to add a Class C Adult Use Marihuana Grow License to the existing (and approved) Class C Medical Grow License and Class C Adult Use Grow License. If approved, both licenses would result in a maximum of not-to-exceed total of 5,500 marihuana plants located within the building. Also as noted, the building's anticipated grow area is approximately 12,987 square feet in size.

Details on each room utilized for the growing of marihuana and selling of marihuana products are as follows:

- **Flower Room 1:** 2,046
- **Flower Room 2:** 2,072
- **Flower Room 3:** 1,034
- **Flower Room 4:** 1,034
- **Flower Room 5:** 1,034
- **Flower Room 6:** 1,034
- **Vegetative Room 1:** 1,892
- **Nursery:** 181
- **Mother Room 1:** 516
- **Mother Room 2:** 516
- **Trim Room 1:** 570
- **Dry Room 1:** 367
- **Dry Room 2:** 367
- **Cure Room 1:** 324
- **Retail Store:** 3,715

The total square footage of grow space is approximately 12,987 square feet, which equates to approximately 2.4 square feet per plant (assuming the maximum number of plants permitted, 5,500, will be on-site). The total square footage of grow space appears to be adequate for the proposed use on the site.

RECOMMENDATIONS

We recommend approval of the proposed site plan for 521 E. Mosel with the following conditions:

1. The applicant shall include a note on site plans stating, “In the event that the lighting on the north side of the building impacts the neighboring property, the Site owner will remove or replace the bulb with a complying fixture.”
2. The applicant shall provide wall mounted light fixture details to the Township to ensure compliance with Township standards, if applicable.
3. That the Planning Commission finds the proposed odor mitigation and waste management plan are adequate for the proposed use.
4. The applicant shall comply with all fire safety requirements as described by the Township Fire Marshal

If you have any questions or would like additional information on this recommendation, please contact Paul Lippens, AICP, Vice President, at PLippens@mcka.com or Danielle Bouchard, Senior Planner, at DBouchard@mcka.com.

Respectfully Submitted,

Paul Lippens, AICP
Vice President

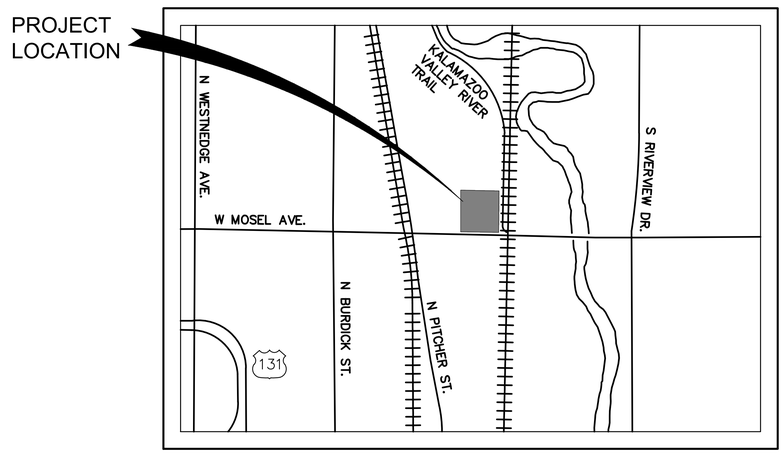
Danielle Bouchard
Senior Planner

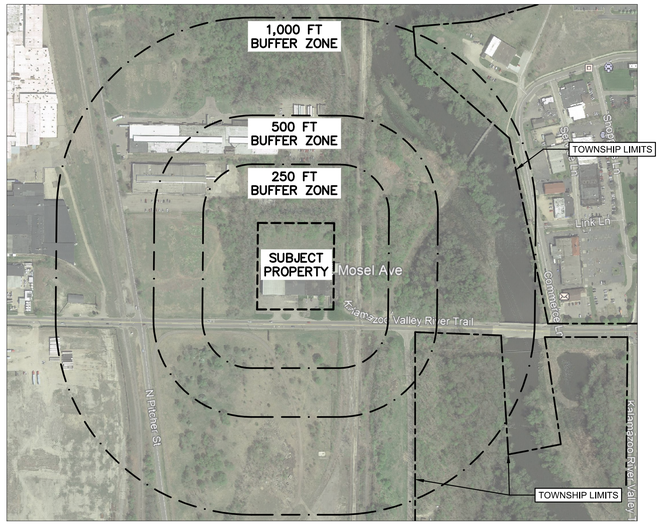
INDEX OF SHEETS

CS	COVER SHEET
C0.1	AS-CONSTRUCTED PLAN
C0.2	REMOVALS PLAN
C1.0	SITE PLAN
C2.0	GRADING, DRAINAGE, & SESC PLAN

PINEBROOK WARREN, LLC

521 E. MOSEL AVENUE
CHARTER TOWNSHIP OF KALAMAZOO
KALAMAZOO COUNTY, MICHIGAN





Know what's **Call** before you dig. **below.**

For protection of underground utilities, the CONTRACTOR shall dial 1-800-482-7171 OR 811 a minimum of three working days, excluding Saturdays, Sundays and holidays, prior to excavation in the vicinity of utility lines. All "MISS DIG" participating members will thus be routinely notified. This does not relieve the CONTRACTOR of the responsibility of notifying the utility owners who may not be part of the "MISS DIG" alert system.

BENCH MARKS:

BM 1 TOP OF HYDRANT PUMP VALVE
Elevation: 763.46 (NAVD 88)

PROJECT LOCATION

SECTION 3, T2S, R11W,
CHARTER TOWNSHIP OF KALAMAZOO,
KALAMAZOO COUNTY, MICHIGAN

OWNER

521 E. MOSEL, LLC
801 W. BIG BEAVER RD. SUITE 402
TROY, MICHIGAN 48084

APPLICANT

PINEBROOK WARREN, LLC
40600 ANN ARBOR ROAD E. STE 201
PLYMOUTH, MICHIGAN 48170
PHONE: 734-564-5320

STATE OF MICHIGAN — BRUCE A. CALLEN — ENGINEER — No. 47392 — REGISTERED PROFESSIONAL ENGINEER

Plan Prepared By:

Bruce A. Callen, P.E.
Callen Engineering, Inc.
108 E. Savidge St
Spring Lake, Michigan 49456

Tel: 616-414-5260
email: bcallen@callenengineering.com

DATE OF PLAN: 02-28-22

ISSUANCES

SLU REVIEW	01-31-22
SLU REVIEW RESPONSE	02-28-22

REVISIONS

DESIGNED BY:

Callen Engineering, Inc.
108 East Savidge Street
Spring Lake, MI 49456
T.616.414.5260
www.callenengineering.com

Drawn by J.W.C.
Engineer B.A.C. Check A.J.B.

Callen Engineering Project No.
022 PINEBROOK WARREN

Sheet No.
CS

TOP OF WATER=752.93'

TOP OF WATER=752.68

RIGHT OF WAY FOR ZANTMAN DRAIN PER L. 858, PG. 1107

30' 20' 30' 80'

TOP OF WATER=752.76

HALF BURIED CONSTRUCTION DEBRIS, UNDALATING GROUND

NOTE: ALL BOUNDARY INFORMATION SHOWN IS FROM EXCEL ALTA

06-03-460-020
SPUR DEVELOPMENT, LLC

06-03-460-040
CHARTER TOWNSHIP OF KALAMAZOO

TREE/BRUSH LINE

EX. BIT

TOP OF WATER=753.15

F.F.=757.90'

F.F.=757.90'

BUILDING

F.F.=758.00'

RIGHT OF WAY FOR ZANTMAN DRAIN PER L. 858, PG. 1107

30' 80' 50'

C/L 9' DOOR

C/L 3' DOOR

C/L 3' DOOR IFF=762.04'

C/L 14' DOOR

C/L 3' DOOR

C/L 8' DOOR

C/L 8' DOOR

C/L 3' DOOR

CB#2193
RIM=761.22
IE S=756.64'
TOP OF 4" PVC RUNS THROUGH PIPE=759.8'

ELE TRANSFORMER

8" FIRE PROT. (PLAN)

PAVEMENT (POOR SHAPE)

CONC

PAVEMENT (POOR SHAPE)

PAVEMENT (POOR SHAPE)

CB#2309
RIM=757.29
IE E=754.21'

P.POLE W/ DROP

NEW CONCRETE

24" HDPE

BIKE PATH

STING 112" X 75" PIPE CH DRAIN (PER PLAN)

CONC. HEADWALL

TOP OF WATER=753.31' AT HEADWALL

CB#2189
RIM=759.87'
IE N=756.3'
IE W=756.29'

U/G COMM

NEW CONC. SIDEWALK

C&G

C&G

C&G

C&G

WHITE STRIPE

YELLOW STRIPE

C/L MOSEL

GAS VENT

CB#1279
RIM=760.25
IE S=755.5'
IE E=755.5'
IE W=755.5'

CB#1270
RIM=759.96
IE S=756.1'
IE E=756.1'
IE W=755.86'

CB#1277
RIM=759.80
IE N=756.2'

O/H COMM & ELE

LEACH BASIN
RIM=759.73'
SUMP=754.53'

CB#1168
RIM=760.32
IE N=756.67'

CB#1148
RIM=760.35
IE S=756.7'
IE W=756.7'

SMH#1104
RIM=761.17
IE W=743.57'
IE E=743.57'

BM- TOP OF HYD PUMP VALVE
EL=763.46'
NAVD '88

C/L MOSEL AVENUE (66' WIDE PUBLIC R.O.W.)

NORTH

0 30 60
SCALE IN FEET

STATE OF MICHIGAN
BRUCE A. CALLEN
ENGINEER
No. 47992
LICENSED PROFESSIONAL ENGINEER

Plan Prepared By:

Bruce A. Callen, P.E.
Callen Engineering, Inc.
113 W. Savidge St., Suite B
Spring Lake, Michigan 49456

Tel: 616-240-9080
email: bcallen@callenengineering.com

DATE OF PLAN: 02-28-22

Callen Engineering, Inc.
108 East Savidge Street
Spring Lake, MI 49456
T.616.414.5260
www.callenengineering.com

callen civil engineers

PINEBROOK WARREN LLC
40600 ANN ARBOR ROAD E STE 201
PLYMOUTH, MICHIGAN 48170
734-564-5320

NO.	ISSUANCE / REVISION	BY	DATE
1.	SLU REVIEW	B.A.C.	01-31-22
2.	SLU REVIEW RESPONSE	A.J.B.	02-28-22

REVISED IN ACCORDANCE WITH CONSTRUCTION RECORDS

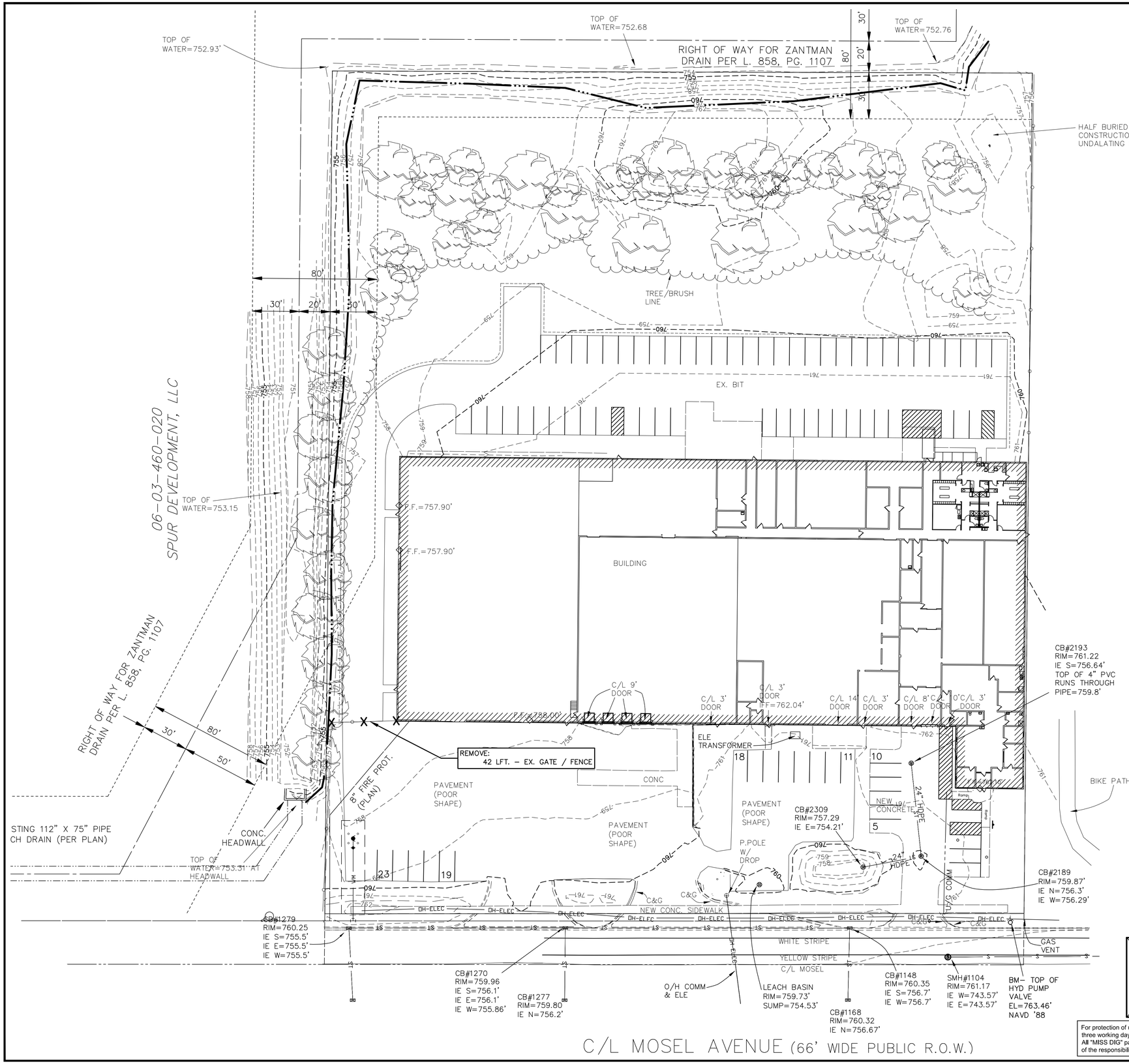
AS-CONSTRUCTED PLAN (AS OF JUNE 2019)

PINEBROOK WARREN, LLC
521 E. MOSEL AVENUE
CHARTER TOWNSHIP OF KALAMAZOO
KALAMAZOO COUNTY, MICHIGAN

DRAWN BY	DATE
J.W.C.	JAN '22
ENGINEER	DATE
B.A.C.	JAN '22
EDIT	DATE
SCALE	
DRAWING	PLOT SCALE
AS NOTED	1:1

PROJECT 022 PINEBROOK WARREN

SHEET NO.
C0.1



NOTE: ALL BOUNDARY INFORMATION SHOWN IS FROM EXCEL ALTA

REMOVALS LEGEND

X REMOVAL ITEM

NORTH

0 30 60

SCALE IN FEET

Property Address:
521 E. Mosel Avenue
Charter Township of Kalamazoo, Michigan 49004

Parcel Number:
39-06-03-460-030

Property Description:

Description: (Tax Description)
Commencing at the South 1/4 post of Section 3, Town 2 South, Range 11 West; thence Easterly on the South line of said Section, also the center line of Mosel Avenue, 991.77 feet; thence North 00 degrees 31 minutes East, 33.0 feet to the point of beginning, also being the West line of the Grand Trunk Western Railroad right-of-way; thence North 0 degrees 31 minutes East on the West line of the Grand Trunk Western Railroad right-of-way 540.73 feet to a point; thence North 89 degrees 48 minutes West, 450 feet; thence South 0 degrees 31 minutes West, parallel to the West line of said Grand Trunk Western Railroad right-of-way to a point which is 33.0 feet North of the South line of said Section, also the center line of Mosel Avenue; thence East parallel to the South line of said Section to the place of beginning.

Total Acreage:
5.59 Acres (171,191 Sft)
(EXCLUSIVE OF R.O.W.)

Property Zoning:
I-2 (GENERAL INDUSTRIAL DISTRICT)

Setbacks:

FRONT:	50 Ft
SIDE:	30 Ft
REAR:	50 Ft

Maximum Allowable Building Height: *2 STORIES OR 40 FT*

Plan Prepared By:

Bruce A. Callen, P.E.
Callen Engineering, Inc.
113 W. Savidge St., Suite B
Spring Lake, Michigan 49456

Tel: 616-240-9080
email: bcallen@callenengineering.com

BRUCE A. CALLEN ENGINEER No. 47992 LICENSED PROFESSIONAL ENGINEER

For protection of underground utilities, the CONTRACTOR shall dial 1-800-482-7171 OR 811 a minimum of three working days, excluding Saturdays, Sundays and holidays, prior to excavation in the vicinity of utility lines. All "MISS DIG" participating members will thus be routinely notified. This does not relieve the CONTRACTOR of the responsibility of notifying the utility owners who may not be part of the "MISS DIG" alert system.

811 Know what's **Call** before you dig.

DATE OF PLAN: 02-28-22

Callen Engineering, Inc.
108 East Savidge Street
Spring Lake, MI 49456
T.616.414.5260
www.callenengineering.com

callen civil engineers

PINEBROOK WARREN LLC
40600 ANN ARBOR ROAD E STE 201
PLYMOUTH, MICHIGAN 48170
734-564-5320

NO.	ISSUANCE / REVISION	BY	DATE
1.	SLU REVIEW	B.A.C.	01-31-22
2.	SLU REVIEW RESPONSE	A.J.B.	02-28-22
	REVISED IN ACCORDANCE WITH CONSTRUCTION RECORDS		

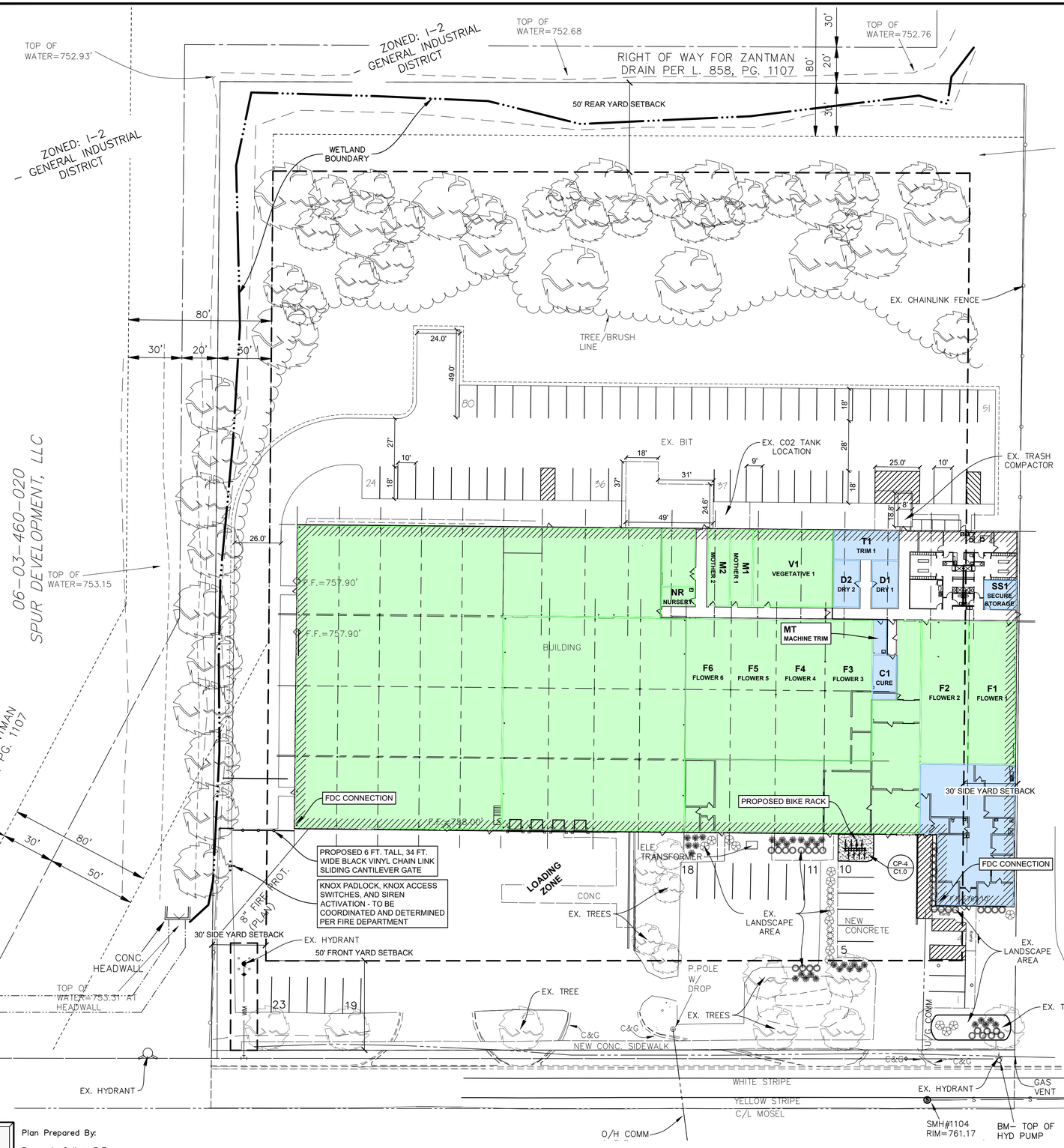
PINEBROOK WARREN, LLC
521 E. MOSEL AVENUE
CHARTER TOWNSHIP OF KALAMAZOO
KALAMAZOO COUNTY, MICHIGAN

REMOVALS PLAN

DRAWN BY J.W.C.	DATE JAN '22
ENGINEER B.A.C.	DATE JAN '22
EDIT	DATE
SCALE	
DRAWING: AS NOTED	PLOT SCALE: 1:1

PROJECT 022 PINEBROOK WARREN

SHEET NO. C0.2



GENERAL NOTES

1. PROJECT INCLUDES USE OF AN EXISTING 70,500 SFT. BUILDING FOR USE AS A GROW FACILITY. NO SITE IMPROVEMENTS ARE PROPOSED.
2. THE DEVELOPMENT IS SERVED BY EXISTING PUBLIC SANITARY SEWER AND PUBLIC WATERMAIN.
3. ACCESS TO THE DEVELOPMENT SHALL BE VIA THREE (3) EXISTING CURBCUTS ONTO MOSEL AVENUE.
4. STORM DRAINAGE SHALL BE CONVEYED VIA SURFACE FLOW, AND DIRECTED TO A PROPOSED RETENTION SWALE.
5. PARKING AND DRIVE AREAS SHALL BE PAVED WITH BITUMINOUS AND CONCRETE PAVEMENT.

PARKING	REQUIRED	PROVIDED
General Retail Sales Use:	1 space per 200 sft UFA 2,064 UFA / 200 = 13 spaces	10 (Front of Bldg) 3 (Rear of Bldg)
Warehouse Use:	1 space per 1,000 sft GFA 59,200 GFA / 1,000 = 60 spaces	13 (Front of Bldg) 54 (Rear of Bldg)
TOTAL:	73 spaces	80 spaces

6. NO NEW SITE LIGHTING IS PROPOSED. IN THE EVENT THAT THE LIGHTING ON THE NORTH SIDE OF THE BUILDING IMPACTS THE NEIGHBORING PROPERTY, THE SITE OWNER WILL REMOVE OR REPLACE THE BULB WITH A COMPLYING FIXTURE. THE APPLICANT SHALL PROVIDE LIGHT FIXTURE DETAILS TO THE TOWNSHIP TO ENSURE LIGHTS ARE COMPLIANT WITH TOWNSHIP STANDARDS IN TERMS OF HEIGHT, SHIELDING REQUIREMENTS, AND NUMBER.
7. EX. LANDSCAPING AND SCREENING SHALL MEET THE INTENT OF CHARTER TOWNSHIP OF KALAMAZOO ZONING ORDINANCE.
8. SITE SIGNAGE SHALL CONSIST OF ONE WALL-MOUNTED SIGN IN GENERAL COMPLIANCE WITH ORDINANCE REQUIREMENTS.
9. SUBJECT SITE MEETS ALL BUFFER REQUIREMENTS PER SECTION 8.02. PART V V. OF THE CHARTER TOWNSHIP OF KALAMAZOO ZONING ORDINANCE.
10. REQUIRED LOADING ZONE LOCATED IN BUILDING INTERIOR AND LOADING BAYS FRONTING THE BUILDING.

LANDSCAPE DATA

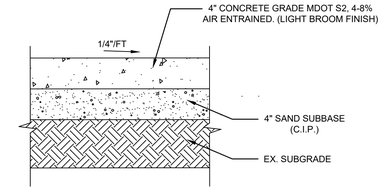
GENERAL SITE LANDSCAPING

TREES

OPEN SPACE AREA: 100,693 SFT.
TREES REQ. (1 TREE / 3,000 SFT.): 34 TREES
TREES PROVIDED: 45 EXISTING TREES

PROPOSED FEATURES LEGEND

- NEW LIGHT DUTY CONCRETE SIDEWALK AREA
- WAREHOUSE USE
- GENERAL RETAIL USE
- EX. TREE TO REMAIN



NOTE: 1) PROVIDE CONTROL JOINTS AT 5' O/C

CONCRETE SIDEWALK SECTION CP-4
NO SCALE

Plan Prepared By:
Bruce A. Callen, P.E.
Callen Engineering, Inc.
113 W. Savidge St., Suite B
Spring Lake, Michigan 49456
Tel: 616-240-9080
email: bcallen@callenengineering.com

BRUCE A. CALLEN ENGINEER NO. 47392 STATE OF MICHIGAN REGISTERED PROFESSIONAL ENGINEER

For protection of underground utilities, the CONTRACTOR shall dial 1-800-482-7171 OR 811 a minimum of three working days, excluding Saturdays, Sundays and holidays, prior to excavation in the vicinity of utility lines. All "MISS DIG" participating members will thus be routinely notified. This does not relieve the CONTRACTOR of the responsibility of notifying the utility owners who may not be part of the "MISS DIG" alert system.

811 Know what's **Call** before you dig.

DATE OF PLAN: 02-28-22

Callen Engineering, Inc.
108 East Savidge Street
Spring Lake, MI 49456
T.616.414.5260
www.callenengineering.com
callen civil engineers

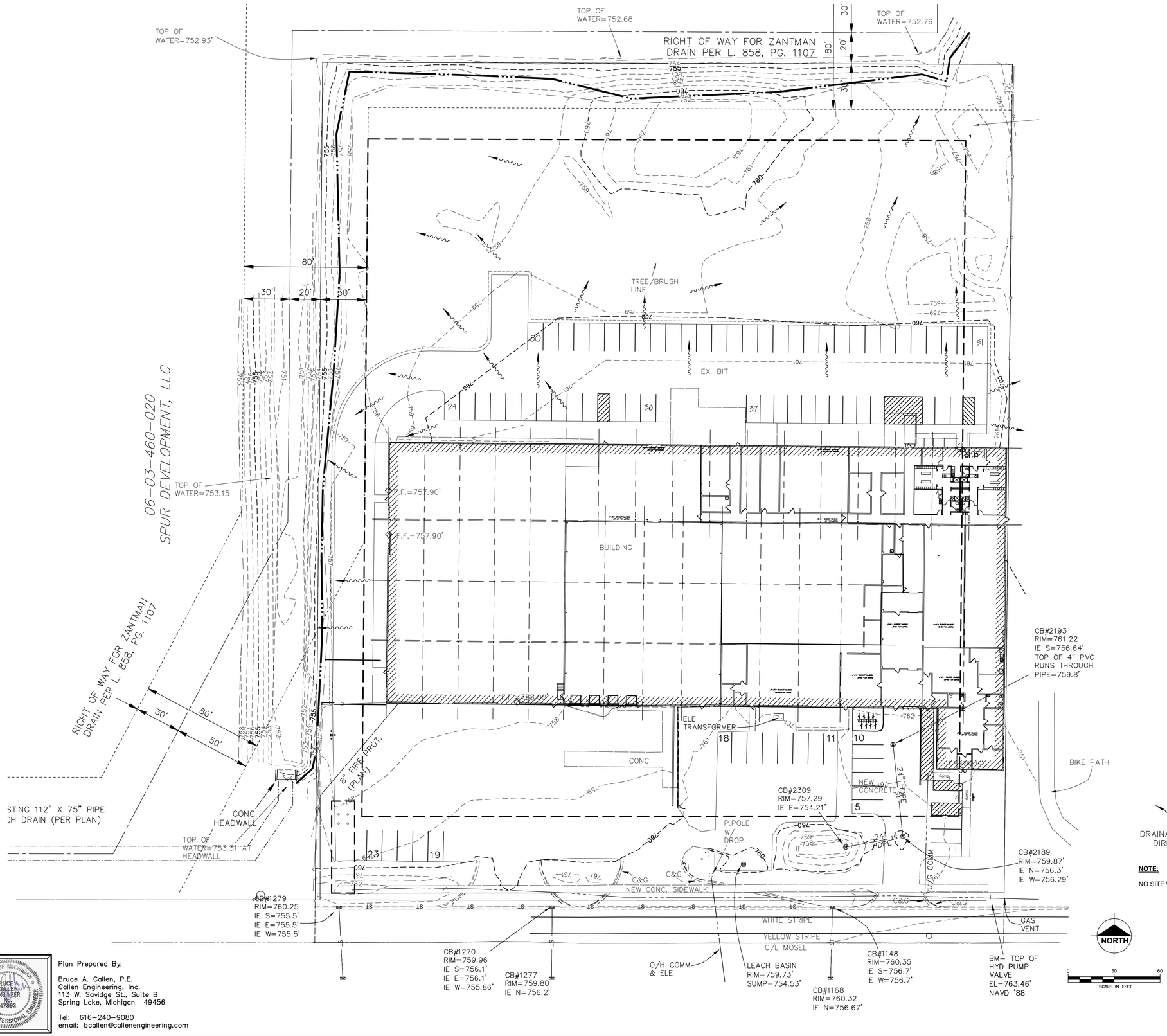
PINEBROOK WARREN LLC
40600 ANN ARBOR ROAD E STE 201
PLYMOUTH, MICHIGAN 48170
734-564-5320

NO.	ISSUANCE / REVISION	BY	DATE
1.	SLU REVIEW	B.A.C.	01-31-22
2.	SLU REVIEW RESPONSE	A.J.B.	02-28-22
	REVISED IN ACCORDANCE WITH CONSTRUCTION RECORDS		

PINEBROOK WARREN, LLC
521 E. MOSEL AVENUE
CHARTER TOWNSHIP OF KALAMAZOO
KALAMAZOO COUNTY, MICHIGAN

SITE PLAN

DRAWN BY J.W.C.	DATE JAN '22
ENGINEER B.A.C.	DATE JAN '22
EDIT	DATE
SCALE DRAWING / PLOT SCALE	
AS NOTED	1:1
PROJECT 022 PINEBROOK WARREN	
SHEET NO. C1.0	



NOTE:

NO SITE WORK IS PROPOSED.

Plan Prepared By:

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Spring Lake, Michigan 49456

Tel: 616-240-9080
email: bcallen@callenengineering.com

STATE OF MICHIGAN — BRUCE A. CALLEN — ENGINEER — NO. 47392 — LICENSED PROFESSIONAL ENGINEER

For protection of underground utilities, the CONTRACTOR shall dial 1-800-482-7171 OR 811 a minimum of three working days, excluding Saturdays, Sundays and holidays, prior to excavation in the vicinity of utility lines. All "MISS DIG" participating members will thus be routinely notified. This does not relieve the CONTRACTOR of the responsibility of notifying the utility owners who may not be part of the "MISS DIG" alert system.

811 Know what's **Call** before you dig.

DATE OF PLAN: 02-28-22

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734-564-5320

NO.	ISSUANCE / REVISION	BY	DATE
	SLU REVIEW	B.A.C.	01-31-22
1.	SLU REVIEW RESPONSE	A.J.B.	02-28-22
2.			

REVISED IN ACCORDANCE WITH CONSTRUCTION RECORDS

PINEBROOK WARREN, LLC
521 E. MOSEL AVENUE
CHARTER TOWNSHIP OF KALAMAZOO
KALAMAZOO COUNTY, MICHIGAN
GRADING, DRAINAGE, & SESC PLAN

DRAWN BY	DATE
J.W.C.	JAN '22
ENGINEER	DATE
B.A.C.	JAN '22
EDIT	DATE
SCALE	
DRAWING	PLOT SCALE
AS NOTED	1:1

PROJECT 022 PINEBROOK WARREN

SHEET NO. C2.0

BUSINESS LOCATION PLAN

Facility Location: 521 E. Mosel Ave. Suite B, Kalamazoo, Michigan 49004

Facility Type: Medical Cultivation – Class C Grower & Adult Use Grow – Class C Grower

Executive Summary

Pinebrook Warren, LLC (hereinafter referred to as "Pinebrook Warren" or "Company") seeks to be a Medical Cultivation – Class C Grower and Adult Use Grow – Class C Grower at the cannabis facility located at 521 E. Mosel Ave., Suite B, Kalamazoo, MI and will be co-located upon approval with a Retailer located in Suite A. Our approach begins with the Good Agricultural Practices (GAP), Good Handling Practices (GHP), and Good Manufacturing Practices (GMP) that have allowed Pinebrook Warren's cultivation teams to produce award winning and genetically diverse strains of cannabis.

Our integrated workflows and operational practices promote smooth transitions of cannabis to state of the art Processing facilities, where our highly-experienced staff process, extract and infuse our cannabis material into high quality product offerings to serve qualifying customer needs.

HEALTHY, NOT HIGH. WE ARE USING CANNABIS TO MAKE THE WORLD A BETTER PLACE.

Cannabis is changing everything. We are in business to ensure that the most people benefit from cannabis, worldwide. We are here to support and grow this important industry, securing a future for all by harnessing the incredible potential of this amazing, misunderstood plant.

Our goals are to bring cannabis products to the world, educate the public about the plant's value, and change the perception about hemp, medical and adult use marijuana into one that honors the valuable commodity that cannabis truly is.

Corporate Structure

See Attachment A, Certificate of Formation and Operating Agreement

Company Key Objectives

In accordance with Pinebrook Warren's mission, Pinebrook Warren's goal is to provide the following for Michigan customers:

- To cultivate, produce and provide safe, high-quality medical and adult-use marijuana for qualified customers throughout the State of Michigan.
- To safely implement and operate our full co-located facility, in accordance with all Michigan regulatory and inspection protocols.
- To establish and implement standard operating procedures that enhance productivity and function in total compliance with the Michigan Regulation and Taxation of Marihuana Act ("MRTMA"), Medical Marihuana Facilities Licensing Act ("MMFLA"), Public Act 10 of 2018 ("2018 PA 10"), the Michigan Medical Marihuana Act ("MMMA"), the Marihuana Tracking Act ("MTA"), the administrative rules promulgated by the Michigan Department of Licensing and Regulatory Affairs Bureau of Marihuana Regulation ("Department"), Kalamazoo Township local marihuana ordinance, and all applicable state and local laws, regulations, ordinances, and other requirements (collectively the "Marijuana Acts")

- To reduce the barriers and improve access to medical marijuana and its potential benefits, including the potential to reduce health disparities in underserved and minority residents.
- To revitalize our neighborhood and contribute to Michigan's wider economic development through job creation, an increased tax base, education and outreach.

Facility Plan

Pinebrook Warren's Cultivation Facility will be located at: 521 E. Mosel Ave, Suite B, Kalamazoo, MI. The landlord's corporate address is 801 W. Big Beaver Road, Suite 402, Troy, MI 48084. Supported by an outstanding team of experienced architects and engineers, the original designer planned co-located Michigan facilities. Each was designed and built to feature state of the art technology with forward-looking green practices. Security and safety are critical components of our operations. We also take every effort to be "good neighbors" in the community. This means providing extensive community outreach, including hiring, indigent care, and public involvement. It also means minimizing any negative impacts or nuisances that may arise from our operations. For any future work at the facility, Pinebrook Warren will provide employment opportunities to local contractors, with a special emphasis on recruiting veterans and people of color in the community, and partnering with local veteran, minority and women-owned businesses as subcontractors.

Market Analysis

Concurrent with the acceptance of medical marijuana, customer-centered care (PCC) also has emerged as a fundamentally new model and approach to health care in the United States. The PCC approach stresses the role of doctor as educator and enabler of an empowered customer who takes an active role in making health-care decisions and implementing them not just in traditional medical choices, but also in complementary care and in life-style changes. This new healthcare approach has dramatically increased self-reported customer satisfaction and improved clinical outcomes (measured by survival and longevity) and customer quality of life (measured by such objective criteria as mental health, ability to return to work, and independent functioning). It even has reduced malpractice litigation.

The Opportunity

We believe that Michigan's marijuana regulatory framework provides an unique opportunity for Pinebrook Warren not simply to cultivate medical and adult-use marijuana, but also to: (a) provide increased Michigan and local employment, revenue and investment, through our multiple co-located facilities; (b) become an industry model for regulated marijuana operations; and (c) provide cutting edge research and development that will help advance the cause of compassionate healthcare.

Insurance

Pursuant to the Marijuana Acts, Pinebrook Warren will provide proof of financial responsibility for insurance. In compliance with the Department administrative rule §420.10 Proof of financial responsibility; insurance, Pinebrook Warren shall ensure at all times Pinebrook Warren has filed a proof of financial responsibility for liability for bodily injury on the form prescribed in section of the act for an amount not less than $100,000.00. Pinebrook Warren shall also carry premise liability, product liability and casualty insurance for an amount not less than $100,000.00 and provide proof

of premises liability insurance to the Department no later than 60 days after a state operating license is issued or renewed.

Capital Requirements

Pinebrook Warren has sufficient capital in place to maintain the proposed Medical Cultivation – Class C Grower and Adult Use Grow – Class C Grower Class C facility.

Pinebrook Warren understands other types of proof of capitalization to cover the expenses of operating and maintaining the proposed marijuana facility may include equity in real property, supplies, equipment, fixtures or any other non-liquid asset. Pinebrook Warren shall provide proof that there is no lien or encumbrance on the asset provided as a source of capitalization.

Facility

Pinebrook Warren is acquiring the facility from an existing operational entity. Pinebrook Warren seeks approval from the state of Michigan and Kalamazoo Township to operate this facility. Pursuant to the Marijuana Acts, Pinebrook Warren has prepared this marijuana business plan for the proposed facility, operated by Pinebrook warren, as a marijuana Co-location cultivation facility to ensure the safety, security, and integrity of marijuana facility operations. The plan below includes:

- Description of Building: Multi-tenant Existing Structural Steel of approx. 70,000 sft.
- Facility Type: Medical Cultivation – Class C Grower and Adult Use Grow – Class C Grower Class C facility
- Location: 521 E. Mosel Ave, Suite B, Kalamazoo, MI
- Description of the municipality: Kalamazoo Township
- Co-Location: A co-located Grower and Cultivation Facility size is approx.. 14,000 of the whole facility (See Attachment B, Site and Floor Plan)
    - Suite A, immediately adjacent to Suite B: Pinebrook Warren medical provisioning center and adult-use retail facility.
- Stacked licenses: None
- Location of common entryways, doorways, or passageways; means of public entry or exit; limited-access areas: (See Attachment B, Site and Floor Plan)
- Floor plan and layout, including dimensions, maximum storage capabilities, number of rooms, dividing structures, fire walls, and entrances and exits: (See Attachment B, Site and Floor Plan)
- Means of egress, including, but not limited to, delivery and transfer points: (See Attachment B, Site and Floor Plan)
- Building structure information, including but not limited to, new, pre-existing, free-standing, or fixed: (See Attachment B, Site and Floor Plan)
- Zoning classification and zoning information: I-2 General Industrial Zoning District in the Charter Township of Kalamazoo
- A proposed security plan.

Pinebrook Warren understands that any changes or modifications to this marijuana facility plan must

be reported to the Department and may require preapproval by the Department and that the Department may provide a copy of this plan to the state fire official, local fire department, and local law enforcement for use in pre-incident review and planning. In the event of any changes or modifications, the Department may re-inspect the Co-location Grower Facility.

Copy of Municipality's Authorizing Ordinance or Resolution

KALAMAZOO CHARTER TOWNSHIP

KALAMAZOO COUNTY, MICHIGAN

ORDINANCE NO. _____

ADOPTED: November 25, 2019

EFFECTIVE: December ___, 2019

AMENDMENT TO KALAMAZOO CHARTER TOWNSHIP ZONING ORDINANCE

An Ordinance to add certain forms of adult use marijuana commercial establishments as special uses in some zoning districts; to provide standards for special uses of adult use marijuana commercial establishments; to provide an effective date; and to repeal all ordinances or parts of ordinances in conflict herewith.

THE CHARTER TOWNSHIP OF KALAMAZOO

KALAMAZOO COUNTY, MICHIGAN

ORDAINS:

SECTION I ADDITION OF ARTICLE 8, SECTIO 8.02 WW TO THE KALAMAZOO CHARTER TOWNSHIP ZONING ORDINANCE

Article 8 “Site Development Standards Related to Specific Uses” Section 8.02 “Scope of Requirements” subsection WW is hereby added to the Charter Township of Kalamazoo Zoning Ordinance to read as follows:

“WW. Adult Use Marijuana retailer and/or grower, processor, transporter, testing facility, and/or microbusiness:

Copy of Business Property Depiction

The facility is currently cultivating medical and adult-use marijuana in Kalamazoo Township that meets the security requirements and passes the inspections pursuant to the Marijuana Acts. A lease will be signed between Pinebrook Warren and the owner of the building, a copy of which will be provided to the MRA. The 70,000 square foot building offers an optimal layout for cultivation, product safety, and security.

Currently 14,000 square feet is used for Grow and Cultivation activities and 4,000 square feet for the Retail and Provisioning activates. The facility meets State and Kalamazoo Township laws and regulations for operating a medical and adult use marijuana facility.

Pinebrook Warren has a strong commitment to the general welfare of our employees and has created a safe environment in which they work. We recognize the importance of and need for complying with the applicable provisions of the building code in order to achieve a safe working environment. The facility is located in an existing building in an industrial zone at 521 E. Mosel Ave, Suite B, Kalamazoo, MI. Consistent with our commitment to keep our employees safe, this building has been analyzed and upgraded as necessary to current code per the Kalamazoo Township's requirements in order to achieve the necessary level of safety and protection consistent with the intended use. Any new construction, alteration and reconstruction will be designed in compliance with then applicable building, fire, electrical, mechanical, and plumbing codes. The current design has incorporated the latest technologies to conserve energy, select the most environmentally friendly materials, and lessen our carbon footprint while optimizing the growing conditions for healthy Plants.

Construction Improvements

Pinebrook Warren's facility is located in an industrial zone, at 521 E. Mosel Ave., Suite B, Kalamazoo, MI, on a secure site. The lot that this building sits on is 5.6 acres.

Building

The building is constructed of structural steel and cinder block walls. The roof is a combination of pitched steel and flat rubberized roofing materials with integrated drains.

The areas that have been reconstructed for the cultivation facility, a new wet fire suppression system has replaced the old dry system. The system has been pressure tested along with the flow valves.

Facility Lot

The parcel of land that the Facility sits on is approximately 5.6 acres. The areas not covered by a building or structure is used for parking, circulation and open space. A new 57 space parking lot with fire safety lanes has been added to the north side of building.

Parcel ID #06-03-460-30

Legal Description: 1002340 3906 03 460 030 G 3-52 2 & 51-2A2 SEC 3-2-11 COM AT S1/4 POST SEC 3 TH E ALG S LI SD SEC 991.77 FT TO W LI GTWRR ROW TH N 0DEG31 MIN E THEREON 33 FT TO N LI MOSEL AVE FOR POB TH N 0DEG 31MIN E ALG SD ROW 540.73 FT TH N 89DEG 48MIN W 450 FT TH S 0DEG 31MIN W 542.3 FT TO N LI SD AVE TH E 450 FT TO BEG* 5.59 A

Approximately 1500 linear feet of new wall has been constructed comprising the Pinebrook Warren facility. In addition to other upgrades to electrical, mechanical and other utilities required to maintain the facility.

CONSTRUCTION SPECIFIC LEGEND

FLOOR		**WALLS**	
CPT	Carpet	CMU	Concrete Masonry Unit
CONC	Concrete, Broom finish	EXP	Exposed Structure, no finish
CONC-S	Concrete, sealer	GWB	Gypsum Wall Board
CT	Ceramic Tile	CT	Ceramic Tile
VCT	Vinyl Tile	P	Paint
PLY	Plywood		
ASP	Asphalt		
BASE		**CEILING**	
-	None	ACT	Suspended Acoustical Tile
CT	Ceramic Tile	EXP	Exposed Structure, no finish
VB	Vinyl Base	GWB	Gypsum Wall Board
FRP	Fiberglas Reinforced Plastic	P	Paint

CONSTRUCTION SPECIFICATIONS BY DEPARTMENT

Department or Room Name		**Area (sq. ft.)**	**Interior Finish Schedule**			
			Floor	**Base**	**Walls**	**Ceiling**
Cultivation	Breeding	300	CONC-S	FRP	GWB/P	P
	Cloning	400	CONC-S	FRP	GWB/P	P
	Vegetative	1400	CONC-S	FRP	GWB/P	P
	Mitigation	NA	CONC-S	FRP	GWB/P	P
	Flowering	6400	CONC-S	FRP	GWB/P	P
	Harvesting & Drying	625	CONC-S	FRP	GWB/P	P
	Trimming& Packaging	1000	CONC-S	FRP	GWB/P	P
	Conference Room	160	CPT	VB	GWB/P	P
	Clean Room	630	CONC-S	FRP	GWB/P	EXP/P
	Lockers	1000	CONC-S	VB	GWB/P	GWB/P
	Men & Women's Restrooms	INCL ABOVE	CONC-S	VB	GWB/P	GWB/P
	Receiving	1250	CONC-S	GWB/ P	GWB/P	EXP

	Transport Area	1000	CONC-S	GWB/P	GWB/P	EXP
	Waste/Recyclables	400	CONC-S	CMU	GWB/P	EXP
Administrative	Administrative	160	CONC-S	VB	GWB/P	EXP/P
Lot	Facility Lot	243,936	ASP	OPEN	OPEN	OPEN

Breeding Department

The Breeding Department is where the Breeding Mothers and Breeding Fathers, as described in Cultivation Plan, are raised. In order to prevent the Breeding Fathers from pollinating other areas of the female Plant population designated for Flower production rather than Seed production, the Breeding Department is isolated from the other Departments and physical traffic are controlled. The Breeding Department is kept as a sealed and sterile growing environment with negative air pressure to ensure pollen from male Plants does not escape. A clean room is provided at the entrance into the Breeding Department through which employees have to pass. This limits the level of environmental pollutants such as dust, airborne microbes, aerosol particles and chemical vapors that can be carried into and out of the Breeding Department. Seed germination as well as initial sexing of new strains will be done in this facility.

Cloning Department

The Cloning Department is where Cloning Mothers, as described in the Cultivation Plan, are grown large enough under a *Vegetative Lighting Cycle* (18-24 hours of lighting) to be able to produce enough Cuttings to service Pinebrook Warren's Supply Chain. There is a designated area in the room for Cloning Mothers that will be in large 15-gallon plastic pots placed on rolling greenhouse benches. On the other side of the room there are large racks with LED cultivation lights to help these Cuttings develop roots and become Clones. These Cuttings are placed inside of humidity domes, and the humidity domes are Co-located in large racks several rows high.

Vegetative Department

The Vegetative Department is where Clones, as described in the Cultivation Plan, are grown into full size Plants, under a Vegetative Lighting Cycle, so they are large enough for maximum flower production. The Vegetation Department is an isolated area with sterile walls, controlled temperatures, and double stacked rolling greenhouse benches for Teens to grow in.

Mitigation Department

The Mitigation Department is an area that isolates compromised Plants from the rest of the Plant population. These Plants are placed in mitigation as an attempt to revive them and achieve our goal of minimizing Plant loss. If a Plant is revived, it is placed back in the production line that it came from. If a Plant is not revived, it is sent either to the Extractions Department or composted. Mitigation takes place in Grow Tents, as described in Cultivation Plan, that are deployed as needed in the open circulation spaces provided within the facility. This helps to provide varying levels of quarantine within each Cultivation Department.

Flowering Department

The Flowering Department is where Teens, as described in the Cultivation Plan, begin producing Cannabis flowers. The Flowering Department is divided into 2 different rooms. Having 2 rooms allows us to stagger our harvests and produce many different Strains. The 2 flowering rooms are separated by airtight, full height, insulated, steel stud-framed and sheetrock sheathed walls. A greenhouse rolling bench system is deployed in rows in each of the controlled rooms. The Flowering Department will maintain the same basis of design and environmental quality as the rest of the facility. Access to the Flowering Department is controlled and limited to only those individuals that have direct responsibilities in that zone. Generally, staff will only have access to 1 zone, so that if a contamination does occur, it does not affect the other rooms.

Harvesting & Drying Department

The Harvesting & Drying Department is where the Flowering Adults, as described in the Cultivation Plan that have completed their flowering cycle are cut and hung to dry. These Plants are naturally dried in a temperature-controlled room with adequate air circulation. It is important that the finished Plants are not dried too quickly as this can affect the Plant's smell and taste, but also that they do not dry too slowly as this can attract mildew and mold.

Trimming Department

The Trimming Department is where the fully dried Hanging Adult, as described in the Cultivation Plan, is brought for Trimming. The Trimming Department is a large sterile room full of ample lighting, tables and chairs. Trimming entails cutting off any remaining Plant matter (leaves, stems, etc.) from the dried Hanging Adult. Trimmers only have access to the Trimming Department and Harvesting & Drying Department and are not allowed in the other production areas of the Facility.

Receiving Department

The Receiving Department is where general supplies and equipment are received for the facility operations.

Clean Room

The Clean Room is an environment where all individuals that enter the Production Building are required to go through to ensure no outside hazards are brought into the Facility. The Clean Room is a highly controlled area that limits the level of environmental pollutants such as dust, airborne microbes, aerosol particles and chemical vapors. The air entering a clean room from outside is filtered to exclude dust, and the air inside is constantly re-circulated through high efficiency particulate air (HEPA) and/or ultra-low particulate air (ULPA) filters to remove internally generated contaminants. Individuals enter and leave a clean room through airlocks and wear protective clothing such as hats, face masks, gloves, boots and coveralls. Equipment inside the clean room has been designed to generate minimal air contamination, and specialized mops and buckets are used for cleaning the clean rooms. There are two clean rooms; the first one adjoins the Lockers and is for the Harvesting, Drying, and Trimming departments. The second is located at the entrance to the Breeding Department.

Lockers

The Lockers are where all individuals must store their personal belongings in a secure storage space. No personal items can be brought into the Cultivation Building for security and contamination reasons. Furniture in the Lockers will be designed to produce a minimum of particles and be easy to clean.

Men & Women's Restroom

The Men's and Women's Restrooms are provided within the main production area on the first floor. The restrooms have been designed to Michigan's Building Code standards for Group F-1 occupancy and comply with ADA requirements. Refer to the table above for the interior finishes of the restrooms.

CGE/Mechanical

The CGE/Mechanical room is where mechanical equipment is housed for the closed loop aeration system that keeps all environmental conditions contained within a particular zone. The space is sized to accommodate the equipment in accordance with the manufacturer's recommendations.

Product Safety Laboratory

The Product Safety Laboratory is where samples that are collected at various stages of the production process are brought and analyzed for a variety of tests. This department will be included in future expansion if it is needed.

Security & Surveillance Room

The Security Department is where the on-site security personnel are located with the security monitors. The main computer server is located in a secure office area.

Wastes/Recyclable Area

The Wastes/Recyclable Area is a secured area where wastes, composts and recyclables is stored for distribution and/or disposal. Pinebrook Warren's policy of minimal waste is assured and not compromised by having a central controlled location for pick up and proper documentation. The Wastes/Recyclable Area is away from public view at all times.

Administrative Building

The Administrative Department is where employees operate that do not have direct responsibilities to the cannabis cultivation, but have responsibilities that require them to be in close proximity to the Cultivation Building. Any staff that does not require having close proximity to the Cultivation Building (e.g., bookkeepers, IT personnel, sales, etc.) are housed in an off-site office location.

Parking

57 parking spaces are provided in the north Facility lot and 15 parking spaces are provided in the campus lot. The lot surface is 2" asphalt over a road gravel and sand base. The parking stalls are marked with 4-inch wide yellow stripes.

Circulation & Open Space

Circulation and Open Space are those areas that are not covered by building improvements or parking. They are lawn, landscaping or unmaintained area.

Hydroponic Drip System Design

The primary cultivation method Pinebrook Warren will utilize is a Hydroponic Drip System. This method gives a Plant exactly what it needs, when it needs it, and in the amount that it needs to allow a Plant to be as healthy as genetically possible while also achieving our goal of zero waste. This is accomplished by using a simple, systemized layout for our various Departments to run irrigation lines for supplying water and nutrients to Plants. While the array and layout of irrigation tubing varies between all of the Departments for each different stage of the Plant's development, the basic system consists of irrigation manifolds between each of the rolling bench rows that effectively feeds all Plants, with the custom rolling benches being the support structure for the irrigation manifolds. For more information on our hydroponic design refer to our Cultivation Plan below.

Mechanical/Electrical/Plumbing Design

The Mechanical/Electrical/Plumbing design incorporates the latest technologies intended to conserve energy while optimizing the growing environment for healthy plants. The project design and build execution approach is a LEAN delivery method that minimizes waste, selects the most environmentally friendly materials, and delivers a project quickly where speed to market is absolutely critical. This section describes our HVAC Design, Electrical Design and Plumbing Design.

HVAC Design

The major source of heat inside the building is from the cultivation lamps each lamp is 1,200 watts and there are 300+- of them. These lamps will be served by dedicated and closed ducted air systems. The ceiling installed air handlers for this system will be water chilled type conditioners for maximum efficiency. The inside non-cultivation environments (non-lamp loads) are served by roof-mounted air handlers to isolated zones and utilize our water chilled system and are more efficient. These air handlers control the space temperature and particles and pest contamination. Humidity and carbon dioxide (CO_2) content, are monitored and controlled through the cultivation automated process controller. Pest and bacteria treatment will be through HEPA (high efficiency particulate air) filtration and are pesticide and chemical free. The air treatment process meets all local mechanical codes and exceeds energy standards. Any exhaust from the growing area is carbon filtered and treated for odor.

The HVAC design incorporates high efficiency water cooled chillers with a cooling tower condenser water system. They are located in a utility yard adjacent to the building. Water treatment for the cooling

towers is chemical free. Chilled water is distributed using high efficiency pumps to the roof-mounted air handlers.

The plant nursery will have similar HVAC systems to the growing zones, except that they will be smaller. The post-harvest production areas will provide an environment for the best drying and production needs, and any exhaust air will be fully treated for odor. The non-production areas will be designed with the same care for conservation and will meet or exceed all local building codes and energy standards.

Electrical Design

There is an existing 480 kv substation with sufficient capacity to meet the current loads for the manufacturing and cultivation facility. All distribution equipment, transformers, panels, and controllers are located outside the cultivation area. The electrical system design includes the following elements:

- A flexible, moisture proof distribution system to the 300 watt Grow Lamps and Fixtures.
- Programmable lighting control system with multiple levels of control.
- A powerful distribution system utilizing high efficiency transformers.
- Feeder distribution, disconnecting equipment and final connections to all HVAC equipment.
- Lighting for office areas and corridors per code.
- Receptacles and power requirements for office areas, corridors, storage, harvesting and loading areas per National Electrical Code.
- Exit and emergency lighting per National Electrical Code.
- Exterior security flood lighting.

Plumbing Design

Plumbing systems will utilize low-flow fixtures and will be built to LEED conservation standards to maximize LEED points. The feed water (hydroponics) to the plants is designed and installed for 'just in time' delivery to minimize water waste and treated with the proper nutrients as described in Irrigation Systems and Control. Excess wastewater generated from the feed water is collected in drain tubes at the end of each rolling bench and pumped into our in house grey water treatment facility where it is re-filtered and re-used for subsequent feeds. Any black/wastewater is sent to a separate system for treatment and subsequent disposal into the existing 4-inch site sewer lateral.

Fire Sprinkler System Design

An automatic sprinkler systems is provided in all areas and designed to comply with the Kalamazoo Township requirements and the National Fire Protection Association 13 (NFPA).

Fire Alarm System Design

The fire alarm system has been designed and installed to comply with the Kalamazoo Township requirements. It is a fully analog addressable fire alarm system comprising of a main fire alarm panel which is fully networkable and expandable.

Security System Design

The system includes CCTV cameras located at entry/exit points, corridors, cultivation zones, and shipping and receiving areas. The CCTV system has a digital video recorder with 128 GB of storage.

Parking

Off-street parking per township zoning has been installed. All the parking spaces are striped with yellow lines 9.5 feet apart. In addition, parking lot lighting has been provided as necessary. The design of the parking lot conforms to ADA standards.

Utilities

Pinebrook Warren has obtained all necessary utilities for our operations, including: water, sanitary, electrical, telephone and storm drain services.

Water Service

Water is provided by a new 6-inch from the City of Kalamazoo water main in Mosel Street. The existing 6-inch ductile unmetered fire water line and the existing 2-inch metered domestic water line remain. Fire hydrant service in the parking lot is connected directly to the existing 6-inch fire water line. The domestic water demand for the facility is estimated at 80 gpm. The fire service demand for the facility is estimated to be 1200 gpm at 65 psi. This service is not metered but will have backflow prevention.

Sanitary Service

No new sewer laterals were required for the cultivation facility. The sanitary sewer disposal from the cultivation facility is estimated to be 12 fixture units, including wastewater from the wastewater storage tank. The disposal will be via the existing 4-inch site sewer lateral that connects to an existing 24-inch sewer main in Mosel Ave.

Electrical

The existing 2000 amp, 480 KV, 3-phase, electrical service for the dispensary facility is provided by Consumers Energy via underground electrical lines to the main substation.

Telephone

Telephone service is VOIP via CTS fiber.

Storm Drainage

New storm drainage facilities were installed for the Facility. The Facility will be located in an existing building and will not increase the existing runoff at the site. Parking for the cultivation facility is a new paved area, and also will not increase the existing runoff at the site. The existing drainage system primarily consists of overland flow into on-site catch basins. From the catch basins, drainpipes carry the water to the existing Mosel Ave. storm drain outfall.

Structural Engineering Design

The existing building appears to have been well maintained over the years and it also appears to be in a good structural condition, with no obvious signs of unrepaired, deferred maintenance items. Foundations consist of isolated spread footings at interior columns and continuous footings with spreads at exterior columns.

- The exterior walls consist of cinder block and structural steel with insulated steel sheeting.
- The existing roof framing system consists of insulated steel sheeting and rubberized flat insulated materials supported by steel beams and steel columns.

Pinebrook Warren operates its facility in one existing building that has been remodeled in compliance with all applicable provisions of the latest editions of the building, mechanical, electrical, plumbing and fire codes. As a proud corporate resident of Kalamazoo Township, Pinebrook Warren is committed to doing its share to assist the local community by proposing to undertake local public improvements in vicinity of its facility.

Cultivation Overview

The facility received approval from local municipality for a Co-location Growers License to operate at a same location. Pursuant to the Marijuana Acts, Pinebrook Warren shall apply for and be granted separate state operating licenses and pay a separate regulatory assessment for each state operating license at the facility. Pinebrook Warren shall post the state operating license on the wall in its distinct area.

In compliance with the Marijuana Acts, as Pinebrook Warren applies for a Co-location Growers License, Pinebrook Warren has provided the Department an operations plan with established Standard Operating Policies and Procedures (SOPs) which implemented the secure, safe, sustainable, and proper cultivation of Marijuana including our specific agricultural cultivation techniques. All pesticides, fertilizers and other chemicals comply with the Michigan Department of Agriculture. Agricultural cultivation techniques were designed to be compliant with the Marijuana Acts to provide the greatest impact on quality Marijuana for customers, as well as to provide for the least amount of impact on the local environment. Pinebrook Warren has standards and guidelines for

cultivating, propagating, vegetating, flowering, and harvesting Marijuana with safety protocols and equipment use as well as comprehensive employee training. Pinebrook Warren's driven goal and purpose is to provide a steady, uninterrupted supply of quality and affordable Marijuana to Michigan's residents.

Pinebrook Warren is committed to maintaining a highly-functioning cultivation and grow facility, in an environment where Marijuana can be grown in a clean, safe, and efficient manner. Pinebrook Warren is using a strategic compartmentalized approach to the cultivation facility. This is to maximize our square footage to produce the highest quality Marijuana for Michigan customers as well as to prevent contamination, diversion and/or pest issues. We will consider utilizing both vertical and horizontal gain in throughout the facility. Pinebrook Warren has facility-specific SOPs that oversee and maintain equipment operation. Upon purchase, each piece of equipment was identified, labeled, and entered into the Inventory Software (POS) to be logged, tracked, installed, maintained, and accounted for. Pinebrook Warren's SOPs included written policies to maintain the sanitation and operation of equipment that encounters Marijuana to ensure each Marijuana related equipment is regularly maintained, cleaned, and sterilized in between each use to prevent contamination from any materials. If equipment is contaminated all work ceases until the equipment can be cleaned, sanitized, and inspected for re-use or else the equipment is disposed of immediately into a plastic trash bag or container. All automatic, mechanical, or electronic equipment, and all scales, balances, or other measurement devices used in the facility's operations shall be routinely calibrated, checked, and inspected to ensure accuracy. Pinebrook Warren maintains an accurate log of such maintenance, cleaning, and calibration. Pinebrook Warren staff do not use equipment for personal use, and all bulbs and lighting equipment is covered to prevent breakage.

Cultivation Technique Standards

The facility installed benches and double stacked rolling benches that utilize the maximum space available within each stage of growth, while still meeting egress and all other local code requirements. The facility implemented a chiller system as the heating, ventilation, and air conditioning (HVAC) source, each with numerous redundancies as built-in fail-safes. Chiller systems operate more efficiently than traditional HVAC systems, able to operate in much lower ambient temperatures without failing (i.e., 20 degrees Fahrenheit). A future automated fertigation injection system fuels the top-feed drip system, which ensures that the plants receive exactly what they need for maximum productivity in each stage of growth. Inline ozone generators increase dissolved oxygen in the nutrient solution, removing all (if any) anaerobic bacteria, improving productivity and crop success. Pinebrook Warren irrigation approach is considered a recirculating system that decreases water and nutrient consumption by as much as 50%.

BioSecurity: Pinebrook Warren has a biosecurity program to sustain the healthy growth of the crop, to help secure perpetual production, and the availability of the highest quality of product. Biosecurity is the protection of the crop from viral, fungal, bacterial, and parasitic agents. Pinebrook Warren staff and any visitors can spread these agents and pests from one part of the facility to another. The nature of these agents is such that a small amount or population, even an individual insect or spore, can proliferate quickly, to the point where the problem can no longer be controlled, which is why it is important to implement a biosecurity program. During the harvesting process, the plants are being moved around the facility. Pinebrook Warren minimizes the exposure time of harvested plants from potentially bio-contaminated areas. Upon a rack of newly harvested plants arrive at the drying room

door, the cultivation work team shall start removing plants from the rack as soon as possible. Harvested plants should be positioned into the drying room immediately, and cultivation staff keep the Cultivation Area door closed as much as possible, minimizing in-and-out traffic. Once a cultivation staff member has entered a room and started working with the plants, that staff member may not leave the room without decontaminating. No staff member may leave a pest-infested area until that individual is certain that he or she will not need to return to that room or area for the remainder of the day.

All tools and equipment necessary for the day, such as cutting tools, scales, trash cans, bags, etc., are gathered only once, and any tools or equipment that are brought into any areas with pests, mold, or mildew, must be thoroughly sanitized before being taken into other areas of the facility. Before leaving any problem area, cultivation staff must discard their paper suits, shoe covers, and gloves, in a specific trash receptacle. Before these trash bags leave the problem areas, they must be, at the very least, twisted at the top, to close the opening and prevent any infectious materials from escaping the bag, and re-establishing themselves in the facility. All trash must be weighed, logged into the Discard Log and the POS, approved by the Cultivation Manager and discarded immediately. Trash will be removed into a clean holding area during the workday, and only moved from the holding area to the waste disposal area once entry to Flowering, Vegetative, Breeding, Trim or Cure Departments is no longer necessary.

Air Mitigation Plan: The marijuana cultivation industry has many opportunities to enhance its public image, and protect the environment, by incorporating best management practices to reduce or eliminate odors from operations, as well as other adverse environmental impacts. Pinebrook Warren employs key protocols to mitigate any potential problems with air quality and/or contamination. Among these are carbon filtration systems, negative ion generators, and Merv 8 positive pressure filtration devices that effectively remove all airborne pathogens.

Ventilation and Odor Control: The odor from marijuana cultivation operations can potentially be a nuisance, as it can easily migrate in and around the cultivation site. Pinebrook Warren employs ventilation and other odor control measures, adequate to the size of its operation. The facility designed its cultivation room with ventilation systems that take into consideration the canopy square footage and number of plants per room. A properly sized, installed, and well-maintained ventilation system resolves two issues. First, a properly sealed cultivation room prohibits odors from escaping. Second, adding a dehumidification system to each cultivation room, and carefully monitoring each room's relative humidity, controls not only the escape of odor, but the creation of mold and pathogens. Pinebrook Warren employs a primary odor technology that has proven effective in controlling odors from cultivation sites, as well as the use of a secondary technique, negative ion generation.

Activated Carbon Filtration: Pinebrook Warren employs an activated carbon filtration technique that involves forcing the air circulating within the HVAC system through an activated carbon filter, to pull out odors that may pose a nuisance, as well as pathogens that pose a public health risk. This method is highly effective and can be used in combination with other technologies, such as an electrostatic precipitator. Carbon filtration is the least energy-intensive of the three noted technologies. In most cases, the energy required to run the filtration system is already accounted for in the air handling and exchange system. The excess energy necessary to force air through the filter is negligible, and, depending upon the size of the discharge and intake, often only slightly alters the speed of the exchange. The use and disposal of the filters creates the most physical waste; however, the carbon

can typically be regenerated for use. We are also using stand-alone Carbon Filters in non-cultivation spaces in order to catch all odor within the facility.

Negative Ion Generation: Pinebrook Warren employs a negative ion generator. These machines, sometimes called electrostatic precipitators, will use a negative charge to attract positively charged particles in the air. The charged particles are attracted to the metal filters, which, over time, will become concentrated with particles and require cleaning on a regular basis with water. The negative ion generators can improve indoor air quality to a greater degree than some of the other technologies. The environmental impact of this technology is also dependent upon size and use. They are typically powered by a single wall outlet, and can run 24 hours a day, 7 days a week. They will also need to be cleaned, which usually requires removing the metal panel, and washing it to remove the particles. Otherwise, they require very little maintenance, and their energy consumption is typically negligible, and lower than many fans. Including these machines in Pinebrook Warren's established preventative maintenance and replacement plan ensures optimum operation, and continuous odor control.

Air Circulation: Pinebrook Warren maintains a clean-room, bio-secure environment, including its humidity, temperature, and integrated 254 nanometer UVC light sterilization systems and proper air circulation ensure a pathogen free environment. Air circulation through a VC light battles added humidity and 99% of airborne bacteria.

Lighting: Pinebrook Warren utilizes top of the line LED and HPS lighting fixtures. Lighting is selected to benefit the growth cycle of the plants as well as to mitigate excess energy use.

Water: Pinebrook Warren will utilize automated watering systems. With the addition of HD-UV disinfection, our water system is safe, uses little energy, and is low-maintenance. We employ water filtration and reverse osmosis to ensure stable water and our closed loop system will help save water and other additives to the plants. Our irrigation system is designed to provide an ongoing, consistent water flow for the plants throughout their growth cycle.

Plant care and maintenance: Pinebrook Warren's cultivation team includes specialists in agriculture and Marijuana. These combined skill sets provide Pinebrook Warren the ability to review the best methodology for the varieties/strains in our facility. We employ various plant maintenance techniques such as Super Cropping which is a High-Stress Training (HST) technique designed to stress the plant by slightly hurting it in a planned way. Since the cannabinoid level of the plant can be influenced by this methodology, Pinebrook Warren uses it to help create and define more specific cannabinoids based upon the customer needs. We implemented Low Stress Training, or LST to increase top colas (highest quality portion of the plant). This helps to ensure a maximum harvest each time to provide for uninterrupted supply of marijuana. Additionally, techniques including Topping (cutting top off plant between nodes) and FIMing (pinching newest growth not between nodes) will be part of our protocol. These methodologies for plant maintenance achieve better plant shape to more efficiently and effectively use the lighting to produce larger yields.

Production goals and yields: Pinebrook Warren has not more than ninety days elapsing between harvests of at least fifty pounds of marijuana; and maintains an inventory of at least fifty pounds of marijuana that is ready for immediate sale.

Nutrients and Feeding

Pinebrook Warren and its Master Grower dictate the nutrient regimen in accordance with the crop's requirements and the Marijuana Acts. Pinebrook Warren uses only appropriate nutrient practices; shall use only fertilizers or hydroponic solutions of a type formulation, and at a rate to support the healthy growth of plants; shall treat and dispose of wastewater generated from the growing marijuana in accordance with the Marijuana Acts; and shall maintain records of the type and amount of fertilizer and growth additives used. Pinebrook Warren's cultivation staff may not add any additional active ingredients or materials to marijuana that alters the color, appearance, smell, taste, effect, or weight of the medical marijuana, unless Pinebrook Warren first obtains the prior written approval of the Department. Outlined below are the systems Pinebrook Warren will be utilizing for nutrients and feeding.

Reverse Osmosis and Water Filtration:

Pinebrook Warren will use a reverse osmosis water filtration system. Reverse osmosis is a water purification technology that uses a semipermeable membrane that can remove many types of molecules and ions from solutions, and is used in both the industrial processes, and the production of potable water. The result is a solute retained on the pressurized side of the membrane that allows the pure water to pass through to the other side.

pH adjustments: Pinebrook Warren maintains adequate levels of pH within its water system, as the potential hydrogen (pH) measurement in the water influences the availability of nutrients. Minerals can be completely blocked out at certain pH levels. Before irrigating, pH will always be checked. The recommended pH range for all vegetative and flowering plants is 5.7-6.3 therefore rockwool soaking solution should be 5.3-5.4, due to the fact that rockwool has a high natural pH that must be offset. When assessing pH parameters, if the pH is above the acceptable range, add a small amount of pH down directly to the reservoir. For example, if the meter is reading 6.5, and the acceptable range is 5.7-6.3, add pH down. If the pH is below the acceptable range, add a small amount of pH up. For example, if the meter is reading 5.4 and the acceptable range is 5.7-6.3, add pH up. pH up and pH down are extremely potent, making it easy to overdo. Start with just a few drops to get a feel for how much it takes to reach desired levels, and do not use a water mixture that has had a large addition of either substance, due to the fact that these additives affect the nutrient balance of the mixture. Allow 1-2 minutes for pH adjuster to thoroughly mix with the nutrient solution, using a water circulating pump to hasten the process. Continue to add small amounts of adjuster until pH rests within the acceptable range. Record the final pre-feed pH and ppm measurement in the notebook located on each plant table.

PPM/EC Adjustments: Pinebrook Warren utilizes PPM and EC which are synonymous terms with different standards of measurement. PPM, depending on the standard used by the meter, is either 500 or 700 times the EC. Both metrics measure the amount of dissolved solids (i.e., food and other organic acids) in the water, providing a general idea of the total amount of food being given to plants. Ideal PPM ranges vary based upon the stage of growth. Each tables' Log Binder has a list of notes and recommended ranges for the particular table being watered.

Drainage: As an environmental protection is one of our top priorities, Pinebrook Warren has a unique plumbing system in its facility, with a drainage point containing two manually-activated solenoid valves. One valve allows for waste containing hazardous material, such as cleaning solutions, to be

diverted to a chemically-approved sump pump, and then pumped to the onsite equivalent of a medical disposal incinerator meant for chemical processing. The second valve allows for the diversion of all non-hazardous waste into the sewer system. This will ensure that no hazardous or unknown waste will enter the underground sewer system at any time.

Above-Grade Plumbing: Pinebrook Warren plans to use a software-driven nutrient injection system that provides the versatility and capability to irrigate 64-different nutrient feed schedules using one system, which in turn allows for nutrient feed schedules tailored to each strain, and to each stage of growth. Control of the nutrient schedule and nutrient ratios, as per the specific strain and stage of growth, provides for optimal feed intake and maximum productivity.

Ideal Medium Conditions: Pinebrook Warren has clean and efficient environmental controls, so as to provide the ideal conditions for the plant mediums. Controlled airflow, pH monitoring of water and feeding solutions, preventative treatment of vegetative plants, and continuous monitoring of plant health, each contribute to the prevention and detection of pests, pathogens, and mold and mildew.

Controlled Climate and Atmospheric Conditions:
Controlled propagation of the plant is in large part contingent upon maintaining stable atmospheric conditions within allowed tolerances of the cultivation space. Temperature, humidity, and CO2 levels are continually monitored via state-of-the-art sensors that communicate information in real-time to facility staff. Pinebrook Warren uses this system to monitor, record, and regulate each room's temperature, humidity, ventilation, lighting, and water supply. Pinebrook Warren attempts to maintain a pathogen-free environment, with adequate humidity, temperature, and integrated 254 nanometer UVC light sterilization systems that provide proper air circulation and sanitation. Air circulation through a VC light battles added humidity and 99% of airborne bacteria.

Strain Varieties
In compliance with the Marijuana Acts, every Strain is registered with the Department and has been assigned a product identifier by the Department before it may be sold to a processor and/or Retailer. Pinebrook Warren understands that before a product is eligible for the assignment of a product identifier, the product shall be registered with the Department.

Pinebrook Warren has an extensive list of varieties otherwise called strains that we cultivate at our facility which can also be used by processors to manufacture marijuana products. The strain list is expansive and diverse to offer an array of medical benefits for a wide variety of ailments. Each strain will be pre-approved by the Department. We have reviewed data from thousands of transactions in operational state-licensed facilities to compare efficacies with varieties cannabinoid and terpene profiles, dosage, methodology of administration, laboratory-testing results and customer specific medical efficacy for the list of cannabis strains outlined below. Pinebrook Warren is committed to a balanced flow of product for Michigan customers and have included several high CBD varieties to ensure low psychoactive marijuana that is available in the market. The strains to be utilized in Pinebrook Warren's cultivation process include the following (S=Sativa strain, I=Indica strain, 50/50=Sativa/Indica, Hybrid S/I=Sativa Dominant, Hybrid I/S=Indica Dominant Hybrid).

Exotic Genetics- Starfighter IX2
Exotic Genetics- Supernatural
Rare Dankness- Ghost Train Haze

Rare Dankness- Midas
Elemental Seeds- Night Train
Sin City Seeds- Tangerine Power
Sin City Seeds- Incredible Power (50%THC 50%CBD)
MTG Seeds- C.B. Diesel (75%THC 25%CBD)
Chimney Rock- HarleTsu x AcidRock (99%CBD) HEMP
Chimney Rock- SourTsunami x Ringo's Gift x Acid Rock (99%CBD) HEMP
Sour ghost
Cookies n cream
Xtrm cream
Jazz
Stank breath
Glue
Death Star
Forum cut
Purple punch
Sour daddy
Rug burn og

Our facility will always display in a conspicuous place, the certificate of operation along with a copy of the current certificate of occupancy for the facility and any other certificate/business license or other authorization required to conduct cultivation activities. Pinebrook Warren will also make these documents available to the Department and all fire code and building officials upon request. Pinebrook Warren will complete all applicable inspections so that a certificate of occupancy issued by the building department will be completed.

Pinebrook Warren will apply for renewal no less than forty-five days prior to the expiration date of the certificate of operation. The regulations provide that this must be completed 30 days prior however Pinebrook Warren is committed to providing this application early. We will provide all necessary fees, copies of inspection reports (current or one completed within previous ninety days) as well as copies of any performance metrics required by the Department. We understand that failure to comply within the thirty-day period could result in the suspension of our certificate for up to thirty days.

The proposed physical address for the Grower and Cultivate Facility is located in Kalamazoo Township at 521 E. Mosel Ave., Suite B, Kalamazoo, MI. Below are the facility specifications, including the cultivation environment, layout of the marijuana cultivation area (i.e. grow tables, tiered or Co-location orientation, etc.) to show evidence that Pinebrook Warren will comply with the Marijuana Acts. The facility was constructed and divided so that plants will be cultivated in multiple manageable rooms rather than in one large open space. This is performed to further reduce the risk for cross contamination of pathogens among separate batches. Experience has proved that controlling the environment is more efficiently obtained within smaller and more manageable sized rooms than addressing environmental issues in a larger open space.

The 70,000 sqft has been divided into functional work areas to provide security for employees and product, minimize exposure of outside contaminants and to help to mitigate unnecessary

environmental use such as excess power, air, and water. Employees enter through locked, secured door only after providing clear identification. Vendors and visitors will comply with regulations regarding identification and enter through the same secure area. This entrance will lead into a Receiving Room with access to restrooms. Adjacent to the Receiving Room are the Office and Security Rooms. These are only accessible from the interior of the building and require additional security measures to enter. Before entering the Cultivation Area, all employees, vendors, and visitors will be required to leave personal items in lockers and change into facility specific clothing. This is part of Pinebrook Warren's SOPs to protect the people and product in the facility.

The 14,000 sqft Grow and Cultivation Area will also encompass a small Mother/Clone area that is divided as to protect the genetics of the varieties of marijuana in the building. The Grow and Cultivation Area has a sink for handwashing and a bucket wash out area for equipment cleaning. Two emergency exits are in this area. These exits are secured and alarmed per our Security Plan. We will be utilizing rolling grow tables to maximize our square footage and to protect our employees from moving heavy plants and/or adjusting systems. Pinebrook Warren will employ cannabis grow tents for any marijuana plant that needs specialized growing environments. Grow tents provide flexible, cost effective methods that are easy to adjust and manage. These tents are available in many sizes which will provide our cultivation team the best opportunity for successful, variety specific environments within our facility. All activity within each tent will be logged and recorded to the specifications for safety and security per the regulations.

The Trim/Drying Room is 1625 sqft of combined space in 3 rooms and will be set with an area for curing the marijuana. The area will have apparatus for drying the marijuana as well as equipment used for the storage of marijuana during the cure process. We will employ both vertical as well as horizontal use of the room. The room's temperature control will be between 65-70F and its relative humidity controlled to 47-53% Exhaust venting and air exchange to remove and renew the entire volume of drying-room air at least once every hour. Lighting will be minimal to protect the marijuana. Once marijuana is harvested, the cultivation team will utilize this room for trimming and prepping for curing. Trimming equipment and tables will be stored in this area. All equipment are cleaned and sanitized before and after each use per our SOPs. Our curing process is consistent monitoring of the relative humidity (RH). We use glass jars or stainless steel containers during this stage and will open the jars every five days to let the buds "breathe" for a half hour to an hour employing a "burping" process. Curing marijuana is a critical step to provide a superior quality product and allows for the storage of marijuana for longer periods without worrying about mold or the loss of cannabinoid content.

Once cured and after proper testing results from the state licensed laboratory, the marijuana is packaged in the Trim Room. This room is our final quality check area. Prior to packaging our cultivation manager and team inspects the marijuana prior to final distribution. All packaging materials and labels for providing marijuana to licensed dispensaries, processors and laboratories is compliant and safe. All packaged is placed in our 375sqft Secured Storage Vault Room until transportation to final distribution point.
For additional protection of the marijuana, we will install a backup generator to the facility. The sensitive nature of growth cycles requires additional support and will help ensure our ability to provide consistent supply of marijuana to Michigan customers.

Pinebrook Warren's grow and cultivation records which encompass production records, including planting, harvesting and curing, weighing, and packaging and labeling are stored for no less than five years.

Standard Operating Procedures

Pinebrook Warren has standards and guidelines for cultivating, propagating, vegetating, flowering, and harvesting marijuana, including safety protocols and equipment. Our SOPs and all activities related to them are designed to ensure a safe, consistent product supply and minimize the deviation in quality of the production batches of marijuana. Pinebrook Warren's SOPs are built from industry knowledge in compliance with the Michigan MRTMA Program and are available to the department upon request. Included in the full SOPs are defined procedures for the cultivation, storage, inventory, and transportation of marijuana, designated in compartmentalized functional areas within the facility. Pinebrook Warren's SOPs employ exemplary sanitation principles related to receiving, inspecting, transporting, segregating, preparing, packaging, and storing marijuana.

Cultivating: Starting with the system design and continuously throughout each harvest, Cultivation Staff consider the timing of each stage for the efficient production of yields and continuous workflow without interruption. All seeds are identified and logged upon purchase and are tracked immediately upon planting.

Seed Germination: All seeds are identified and logged upon purchase and are tracked immediately upon planting. Seed germination is a delicate part of the cultivation process, and one of the most important, as it lays the foundation for the upcoming crop cycle. As such, it is important this is done so in an area clean and free of debris, and that all Facility-specific SOPs are followed as dictated by Pinebrook Warren and its Master Grower.

Cycle Planning: Pinebrook Warren maintains an efficient and compliant timeline, for the efficient and low-waste production of plant material. As listed in our production timeline, we stay on task in each of the growth cycles. Pinebrook Warren's Propagation Stage Cycle lasts 3 weeks, from cutting to transplant; its Vegetative Stage Cycle lasts 2 weeks in Stage 1, 2 weeks in Stage 2, 2 weeks in Stage 3, at which point the plants are moved to 1 of 2 Flower Areas, for a Flowering Stage Cycle lasting 8 weeks, from flower onset to harvest. This means that as plants transition into the Flowering Stage, Cultivation staff can begin cloning new plants, and Flowering Areas can be replaced with new plants immediately upon harvest, for a completely uninterrupted workflow. These processes ensure a 100% protocol success rate, allowing staff to utilize each new cutting taken.

Propagating: The Propagation Stage, or cloning, is a particularly sensitive period, in which several daily observations must be completed, to ensure the entire cultivation process starts with healthy, vigorous plant material. Cultivation staff ensure the maintenance of all plants during the clone stage through adequate climate conditions, proper level of medium saturation, light stress, nutrient burn, drooping, discoloration, mold, algae growth, root growth, and proper equipment functionality. Cultivation staff properly label each tray, as this is one of the most important aspects of the cloning process. If a tray is mislabeled in any way, and it is discovered once the clones have already been taken, that tray becomes useless; there is no longer any way to accurately identify a mislabeled clone. When labeling a tray, Pinebrook Warren's Cultivation staff always double- and triple-check before, during, and after taking clones, and that the tray is correctly labeled. Each Cultivation staff member is familiar with the leaf patterns of different strains, so that labeling discrepancies will be easy to identify.

As mentioned Cultivation staff consider clone and harvest scheduling from the very beginning. The propagation process itself will take 3 weeks, from cutting to transplant, 2 weeks in Vegetative Stage 1,

2 weeks in Vegetative Stage 2, 2 weeks in Vegetative Stage 3, and then moved to the final stages in 1 to 2 Flower Rooms. The Flower process itself will take 8 weeks, from flower onset to harvest, for each of our selected varieties. This means that as plants go into the flower transition, new plants should be propagated right away, so that they can be replaced immediately upon harvest, ensuring the facility will remain full, productive, and without any gaps in schedule.

When cloned, plants respond slightly different to each cutting's micro-climate. As a rule, facility staff take at least 50% or more cuttings than needed to allow the facility to cull any cuttings that are even slightly unhealthy, or those that are slow to root. Because new clones are relatively cheap to create, this provides the best opportunity to choose the healthiest plants and discard all the rest. Cloning lays the foundation for the remainder of the crop cycle, and the positive and negative impacts incurred during the cloning process can be seen all the way through the entire life cycle of the plant. Pinebrook Warren clones only the healthiest plants in the most sterile conditions, to ensure the integrity of the supply chain, by providing an unadulterated plant stock. Clones are taken only from an approved mother plant. Cloning from mother plants is the same process as cloning from vegetative plants, except for the selection of where the clone is taken. Entire branches are not generally removed from a mother plant. Rather, a clone is taken by cutting just above a node on a mother plant's branch, whereas on vegetative plants, clones are generally taken from removed lower branches that are not important to the flowering process.

The temperature of the Clone Rooms is set to a desired range of 73-77 degrees Fahrenheit. The hygrometer is functioning and in working condition. LED bulbs are set so that there is one fixture per 2'x4' incubation shelf. Incubation shelves are placed along the walls. There shall be propagation heat mats and heat mat thermostats. The lights and mats are plugged into a timer, on an 18-hour photoperiod.

It is important that Cultivation staff pay attention to the size of the clones. All clones should be approximately the same size, as consistency is extremely important at this point. If a clone is larger than the rest, it should be trimmed down more to match the appropriate size. If a clone is smaller and is already close to the appropriate size, little or no trimming of fan leaves may be required. If a clone is too small, it should either be discarded, or placed on the outer edges of the rockwool slab, to receive adequate light during incubation. Not every clone that is taken from a branch will be worthy of incubation. Many will be too small or wispy and should be discarded. The general qualities of a good clone are 5-7 inches in height, with a diameter no wider than 2.5", and no narrower than 1.5". Each clone should have 1-3 nodes below the top grow shoot, and no nodes within 1" of the rockwool surface after submersion. Both new and old growth should like healthy, and each plant shall be free of pests, pathogens, nutrient imbalances, or any sign of light burn or deprivation.

Once the clones have all been cut and appropriately labeled, initialed, and stored, there are several more maintenance steps. Humidity domes shall be placed over the clone, with slightly open vents over the tray. Ensure that all trays are properly distributed over the propagation mats. Each rack can hold 4 trays. One thermometer is placed in each tray, into the rockwool, at a junction point between cubes, submerged as deeply as possible, with the temperature level facing forward for easy readability. Alter the heat mat thermostat as needed, to keep all trays incubating at 78-82 degrees Fahrenheit.

The Clones begin in the Nursery. The rockwool must stay evenly moist at all times and the propagation environment should be maintained between 72 and 78 degrees Fahrenheit with a relative humidity level above 70 percent, for optimal results. The clones require very little care during this stage and

will most likely not need to be watered. New clones should be kept under low intensity lighting. LED lamps from fluence bioengineering are used for this purpose, and are placed 12 inches above the clone trays. Humidity domes are replaced with more-vented domes after the first roots begin to emerge.

When greater than 2/3 of the cubes have rooted, replace the more-vented domes with fully-vented domes for one day, and then remove the dome completely the next day. If wilting is observed within 5 minutes after removing the domes, replace the dome until more roots emerge. Roots should emerge within 7-12 days. If roots have still not emerged past Day 12, something has gone wrong in the moisture/humidity balance of the incubation process. Unrooted clones at this stage may eventually root, but if incubation space is needed, newer clones should use it rather than waiting for the old, injured clones to eventually root.

When clones are first cut, 90%+ humidity is desired to avoid plant transpiration, which will stress cuttings that cannot obtain moisture from the medium. Removing the dome without creating a gradual humidity decline, with the stage of venting described above, will cause the clones to wilt. Slowly exposing the clones to lower humidity allows the clones time to adjust, also known as "hardening off". When the time comes for the domes to come off completely, they will have become accustomed to the lower ambient humidity of highly vented domes, and will not suffer as much shock, resulting in better overall growth. Spraying newly uncovered trays with water or essential oils can also help reduce shock.

Mothers: Due to the importance of maintaining a mix of healthy cultivars with varying medical applications, it is imperative that the Cultivation staff closely observe the conditions under which the mother plants are maintained. Cultivation staff shall ensure the maintenance of all plants during the mother stage, to prevent future unhealthy plants. Common problems that can affect mother plants include overgrowth, stagnant water in the trays, algae buildup, mold from decaying leaves, light intensity, deficiencies, pests, and over or under watering. All mother plants are managed appropriately, and Cultivation staff tags the stem of each plant upon its entrance into the facility. Each tag specifically identifies the mother plant's genetic, source, quantity, group, birthdate, room and table with each tag having a corresponding barcode label and RFID mechanism that logs and reports all movement of the plant during its life cycle in the facility.

Vegetative: Pinebrook Warren's Cultivation staff shall conduct daily observations of the Vegetative plants, to include pest levels, presence of mold, discoloration, root ball saturation, root growth, light intensity, proper layout, ambient climate condition, cleanliness, and light stress. Clean, sterile, working vegetative equipment shall include scissors; small containers; disinfectant solution; clean pots; work carts; tables; and soil basins. After 3 weeks in Clone Stage 2, the clones are ready to move to Vegetative Stage 1. During this period, the light cycle is maintained at 18 hours of light followed by 6 hours of darkness for one week. This process starts in the cloning machines mentioned above. When trying to achieve maximum yield per plan in states with a plant limitation, a longer vegetation period is required to grow the plant. Plants are topped to create several flowering heads from one plant. The following process is used for plant limitation situations.

- Lights are on for 24 hours or a minimum of 18 hours of light per daily cycle.
- The light cycle remains the same throughout the vegetation period.
- Top the plan when the 5th node is present.
- Top down to the top of the node with no stem remaining above the node.

- Topping the plant forces all the other shoots/branch to start growing more aggressively (forces side growth)

These systems consist of a top-fed drip irrigation that is connected to an automated fertigation injection device. At this point, the clones will be placed in to 4" rockwool cubes. At this point, the clones are ready to be moved to the second stage of Vegetative growth. Repotting is done for multiple vegetative stages and are performed as needed.

Flowering: The Flowering areas of the Facility are in constant use, and are extremely sensitive to environmental changes. These changes place a small amount stress on the flowering plants and create an entirely separate set of variables that must be monitored. The nature of both light and cooling are such that careful attention is required to maintain a healthy plant. Pinebrook Warren's Cultivation staff monitor the health and development of all plants in the flowering stage through the proper identification of pests and mold, pruning status, air circulation, light intensity, early or late flowering light levels, drastic humidity changes, the functionality of rooftop cooling units and other HVAC systems and the general condition of the plants in the Flowering Rooms, to include broken stems, and over or under watering. The Flowering period of the plant lifecycle lasts eight to ten weeks, depending on the strain. Throughout this period, nutrients are fed to the plant through their cultivation media. This is accomplished by pumping the nutrient into the top of the media and allowing the roots to absorb the nutrient. The nutrient base is mixed in a large reservoir for each batch. The general order of this process is:

- Reservoir feeds each zone 1 times per light cycle
- Light cycle is 12 hours
- 1000 Watt High Pressure Sodium lighting or LED lighting
- 3.25 plants per fixture
- Night cycle is 12 hours: Absolute darkness is required in the night cycle
- Plant begins to flower

Harvesting: The general 'rule of thumb' for harvest times range from 7 to 16 weeks. This most relates to how the strain ripens. Should we have strains that require more days than average those scheduling discrepancies are handled within the Vegetative Department, as flowering schedules are set. The temperature in the Drying Room shall be set to 75 degrees Fahrenheit, and the humidity shall be set to 50%. Once the humidity drops, and holds below 50%, the temperature shall be dropped to 68 degrees Fahrenheit, and the humidity shall be set to 45%. The Drying Room shall be monitored daily and adjusted as needed. The lights shall be kept off when no one is in the room. Prior to hanging any plants, the entire Drying Room must be disinfected with a diluted medical-grade isopropyl alcohol or vinegar solution, to include the walls, lines, beams, and floor. Special stainless-steel apparatus is deployed to maximize all available cubic space for drying. The Drying Room shall be environmentally controlled and automated to ensure humidity and temperature levels through the use of HVAC systems and high output Dehumidifiers. All ideal parameters for the drying process are monitored through the Facility software-based sensor alert system. Carbon filters and UV-sanitizing devices are used to produce a drying environment that is free from scent and microbial. Plant processing may start after 7 days of drying, and no plant should be left in the Drying Room for longer than 14 days. Each strain harvested shall be processed separately, to keep each strain waste matter specific to itself. The finished plants are cut from their main branch and hung upside down on racks to dry out excess water weight. Each plant is placed at least four feet above the ground and separated by a few inches.

Trimming Stage: Plants are cut at the base, then hand trimming is performed on plants that are not the right shape and size for the mechanical trimmer, depending on their size, trimmed plants are either hung or laid on screens in the curing room to dry. The ideal environment for curing is a temperature of 60 to 70 degrees and a relative humidity between 50 and 60. Once dried, the flower is removed from stems and placed in curing containers. These containers are sealed to draw the moisture from the center to the outside of the flower. For best results, curing should be done in a darkened room. When the exterior of the flowers feel moist again, the covers are removed to continue the air drying process. The bins shall be opened and closed every 2-4 hours typically over the course of a week. This cycle is repeated until there is no moisture on the outside of the flower. The first week of curing affects potency of the cannabis. This process allows the THC in the wet plant to convert from its non-psychoactive, acidic state to a psychoactive, neutral pH product. Removing moisture from the bud evenly allows all the product to become psychoactive THC. Curing also dries the bud enough so that mold does not grow when it's stored or packaged.

The density of the flower influences the time needed to dry; dense buds take longer to cure. As with other curing processes, the care and attention to detail applied during this process will determine the quality of the resulting flower. If not dried and cured properly, you will produce a low-quality product. Trying to speed up the process will trap chlorophyll and impact the taste.

Safety Protocols for Plant Health: It is critical that all Cultivation staff be familiar with cultivation knowledge and techniques that promote general plant health. Given the scope of the Cultivation staff responsibilities, a total team effort is required to monitor and maintain the health and wellbeing of the various crops circulating throughout the various cultivation areas of the facility. The following aspects of plant health are to be generally observed and are not necessarily subject to daily routine schedule. Pinebrook Warren Cultivation staff shall be trained in the processes of what to look for in the health of our plants and our Master Grower leads by example. When inspecting the facility, it is important to go through each stage of growth, starting with the Nursery and Vegetative Rooms, and then each corresponding Flower Room, looking for any forms of deficiencies or lack of vigor.

Product Safety and Testing Protocols

Pinebrook Warren shall uniquely identify each immature plant batch in the statewide monitoring system that will not consist of more than 100 immature plants per each immature plant batch. Each plant that is greater than 8 inches in height or more than 8 inches in width shall be tagged with an individual plant tag and identification information recorded in the statewide monitoring system. The plants will be separated as the plants go through different growth stages. Throughout the plant growth cycle, employees shall ensure that the plant tag is always identified with the plant so that all plants can be easily identified and inspected. All plant's identification information shall be recorded in the statewide monitoring system.

After a tagged plant is harvested, it is part of a harvest batch so that a sample of the harvest batch can be tested by a safety compliance facility. A harvest batch from other plants or batches that has test results pending shall be isolated. A harvest batch must be easily distinguishable from other harvest batches until the batch is broken down into packages.

Before the marijuana product can leave the grower facility, a sample of the harvest batch must be tested by a licensed safety compliance facility as provided in the Marijuana Acts, and test results must indicate a passed test result in the statewide monitoring system before the marijuana can be packaged.

Marijuana product from harvest batches will not be transferred or sold until tested, packaged, and tagged. After test results show a passed test, Pinebrook Warren shall destroy the individual plant tags and the harvest batch is packaged. Each package must have a package tag attached and employees shall ensure this information is placed in the statewide monitoring system.

Pinebrook Warren shall only send products for testing to a Michigan licensed safety compliance facility that uses analytical testing methodologies for the required quality assurance tests that are validated and may be monitored on an ongoing basis by the Department.

Quality assurance tests to include all of the following:

- Moisture content
- Potency analysis
- Tetrahydrocannabinol level
- Tetrahydrocannabinol acid level
- Cannabidiol and cannabidiol acid levels
- Microbial and mycotoxin screening
- Pesticides
- Chemical residue
- Fungicides
- Insecticides
- Metals screening
- Residual solvents levels
- Terpene analysis
- Water activity content

If a sample collected pursuant to Marijuana Acts or provided to a safety compliance facility does not pass after 2 tests the microbial, mycotoxin, heavy metal, pesticide chemical residue, or residual solvents levels test, Pinebrook Warren shall dispose of the entire batch from which the sample was taken and document the disposal of the sample using the statewide monitoring system pursuant the Marijuana Acts.

Daily Manual Inspections*:* Pinebrook Warren and its Cultivation staff perform visual inspections of growing plants and harvested plant material to ensure there is no visible mold, mildew, pests, rot, or grey or black plant material that is greater than an acceptable level as determined by the Department. Cultivation staff is required to perform numerous inspections of plants each day, at all stages of plant growth. When assessing for grey mold and powdery mildew, it's visible, and inspection of the foliage, or leaves, will provide an accurate detection. Grey mold and botrytis appear at the latter half of flower development, so accurate identification will come with inspection of the flower sites during this later stage. Grey mold is prone to larger flowers with larger surface area to become a breeding ground. Thorough visual inspections by peeling back flowers and looking between their sites can be a preventative measure for early identification. As Pinebrook Warren will use a rockwool medium, Cultivation staff can easily check the root zones for rot. Although Pinebrook Warren will utilize an O3 generator to oxygenate the water and kill all bacteria, daily inspection of the root zone by Cultivation staff will ensure there is no Pythium development. A plant's roots should be white, so if black slime is beginning to appear, Cultivation staff should immediately rectify using a certain type of chloramine.

Pest Levels: As part of the ongoing effort to monitor the health of the crop, it is paramount that Cultivation staff can accurately identify the general population of pests within the Facility. Any insect found in the Facility that has the potential to come into contact with the plants must be considered a threat to the integrity of the biosecurity program and must be dealt with appropriately. Any insect of unknown origin should be reported for identification.

Mold: Mold is an ongoing problem that requires constant monitoring. Mold typically first appears in the later weeks of the flowering stage, around the dense regions of the flowering sites. The presence of mold can be revealed by gently peeling back a portion of the flower part of the plant and is best done during the week-6 pruning task. Any suspected mold detected in a plant should be reported immediately, so that corrective action can be taken to either remove said plant or isolate the affected region. The mold that affects marijuana flowers is grey-to-white in color, depending on the type of mold. If there is a questionable spot on the plant, a magnifier should be used to either confirm or deny the presence of mold. The largest flowers should be inspected for mold around 1 week prior to harvest, or in situations where the environmental conditions have been unfavorable, such as extended periods of high humidity during late flowering times. The vegetation around the moldy area will undergo discoloration, turning yellowish-brown, and will eventually die off. Using a magnifier helps for positive identification. Infected plants should be disposed of immediately, in accordance with the disposal procedures as required in the SOPs.

Discoloration: Over the entire course of a plant's life cycle, discoloration of the leaves, buds, or stems, may take place for a variety of reasons. When Cultivation staff is performing routine tasks, Pinebrook Warren advises each staff member to be on the lookout for symptoms that involve discoloration. Discoloration is typically indicative of nutrient or environmental problems, that are likely not isolated to a single plant. It is important that any discoloration be reported immediately, so that the situation can be adequately resolved. Pinebrook Warren shall maintain trouble-shooting guidelines within their facility-specific SOPs to ensure adequate identification, and further prevention of the cause of the discoloration.

Over/Under Watering: All Cultivation staff shall be trained in the identification of under or over watering. The symptoms of over watering are drooping leaves, whereas under watering will show signs of wilting leaves. An irregular watering pattern may result in drooping leaves but isn't necessarily a tell-tale sign of over watering. Regardless, wilting or drooping leaves are a cause for concern, and should be rectified by properly identifying the issue at hand.

Trouble-Shooting: Pinebrook Warren's Cultivation staff shall be adequately trained in the identification and remedying of various plant health problems. If the plant is drooping or has lost its leaf vapor pressure, Cultivation Staff shall look at the mechanics of the system and ensure that the irrigation system is functional. If it is functional, staff shall look to see if the plant is being either under watered, or overwatered. Cultivation staff shall inspect the root zone, to ensure there is no Pythium, or root rot. This will look slimy and blackish-brown. The plant's roots should always be white, so if they are discolored, this is usually due to overwatering. Under watering looks similar, except that you won't see it in drooping leaves. Rather, it will be noticeable in the weight of the medium itself.

If Cultivation staff sees discoloration on the leaves, they will go through the same trouble-shooting methods above, but if the systems are functional, Cultivation staff shall remove a plant leaf and inspect it with a 60x loop, which is a magnifying glass, and inspect for microscopic insects. The smallest

insects are going to be broad mites, which cannot be found with a 20x loop; they look like spiders. Broad mites eat and destroy the plant leaf, which is harmful to the health of the plant because its leaves are there for photosynthesis. When inspecting with the 60x loop, it is important to also look for spider mites. Finally, Cultivation staff should be inspecting for powdery mildew, which looks similar to splotches of powdered sugar, and botrytis, a grey mold, which has a sweet, musty smell.

If there are no bugs present, Cultivation staff shall go back to the nutrient regimen, as there may be a pH issue, or perhaps the nutrient injection system need to be calibrated. Due to the risk of human error in manually mixing a nutrient regimen, Pinebrook Warren mitigates this risk through a computer-driven nutrient injection system. The Cultivation Manager is responsible for ensuring the nutrient injection system is properly calibrated. This shall be done at least once a week, using standard methods to calibrate the total dissolved solids (TDS) meter, and the pH probe.

Sterilization of Designated Areas: To minimize and mitigate possible cross-contamination of botanicals, designated Cultivation Areas are regularly sterilized and treated in between harvest cycles. Only those sterilization and cleaning chemicals and materials that have been approved by the Department will be used. All Cultivation Areas have foot wells at the entrance to each room, filled at the beginning of each shift with a disinfectant solution, and replenished as needed. When entering or exiting, all Cultivation staff members, and any visitors, must press both feet into these sanitizing foot mats to disinfect the bottom of their shoes.

Manual and Electronic Inspection: Pinebrook Warren's Cultivation staff shall perform visual inspections of both growing marijuana plants and harvested marijuana plant material to ensure there is no visible mold, mildew, pests, rot or grey or black plant material that is greater than an acceptable level, as determined by the Department. In addition to daily plant inspections by Cultivation staff, representative "batch" and "lot" samples are frequently inspected, visually and microscopically, for mold, mildew, pests, and any other adulterations. Pinebrook Warren shall maintain a log of all actions taken to detect pests or pathogens, and the control measures used.

Pest Management: Pinebrook Warren has developed an Integrated Pest Management (IPM) protocol for its proposed cultivation area and in its cultivation facility that strictly complies with state laws and regulations to produce medical cannabis. The limited use of pesticides by Pinebrook Warren will conform to all regulations set forth by the Michigan Department of Agriculture and all products used, as part of the IPM protocol will include permitted active ingredients under state regulations and approved for use in greenhouses or food crops. All pesticides must be registered with the Michigan Department of Agriculture and will meet either of the following requirements: (a)Registered with the United States Environmental Protection Agency under section 3 of the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. 136 - 136y (2012); or (b) Exempt from registration under 40 C.F.R. 152.25(f) (2015) and the active inert ingredients of the pesticide product are authorized for use on crops or plants intended for human consumption by the United States Environmental Protection Agency.

Pinebrook Warren will utilize an IPM protocol that uses two pesticide applications with approved active ingredients which will be verified with the regulations. The first product to be used at Pinebrook Warren is the broad-spectrum bactericide/fungicide, Zero Tol 2.0. Zero Tol 2.0 is approved for organic production (OMRI) and works as a broad-spectrum bactericide/fungicide. It is approved for use on food crops, and is particularly effective in preventing the introduction of pests. Under Pinebrook Warren's protocol for Zero Tol application, foliar applications will be performed on plants

three days per week, every other week, until plants transition into the flowering stage of growth. Pinebrook Warren's grow and cultivation operations and quality assurance plan will ensure that limited foliar application of approved pesticides, fertilizers, or other chemicals shall be made after the twenty-first day following the date that a plant is moved into the flowering stage of growth, unless otherwise permitted on the department's approved list. Zero Tol will not be applied more than one every 7 days in the flowering cycle.

The second and final active ingredient included in Pinebrook Warren's IPM program is cold pressed neem oil (According to Michigan Department of Commerce Medical Marijuana Control Program Approval Draft Approval list - CAS number 8002-65-1, 947173-77-5 Listed Use Insecticide). Neem oil is a vegetable oil pressed from the fruits and seeds of the neem tree; an evergreen tree that is endemic to the Indian subcontinent and has been introduced to many other areas in the tropics. Neem oil is an effective fungicide, miticide, and insecticide that has been utilized effectively in other state-licensed medical cannabis cultivation facilities. Neem oil is approved for organic production and is sufficient for foliar control of fungal diseases and insect pests. It has additionally been utilized effectively in the prevention of powdery mildew. It is approved for use on food crops and is particularly effective in preventing the introduction of a host of pests. Under Pinebrook Warren's protocol for the administration of neem oil, foliar applications will be administered on plants three days per week, every other week, until the plants enter the flowering phase. Weekly neem oil applications will alternate with weeks when Azadirachtin is being applied. Neem oil will not be applied to flowering plants.

Pinebrook Warren's cultivation team has created standardized policies for healthy plant production. These policies include a proven and effective IPM protocol. The leadership team is dedicated to limiting pesticide application strictly to two approved active ingredients. If a situation arises requiring pest mitigation or control, Pinebrook Warren remains dedicated to strict compliance to the regulations for pesticide use under state law and regulation and will only use the active ingredients spelled out in the regulations for marijuana grow and cultivation facilities.

Pinebrook Warren will allow for inspection and review by the Department on any of its cultivation and pest management practices upon request. Recordkeeping is an imperative element of Pinebrook Warren's IPM protocol. Extensive physical IPM documentation will be created for all IPM applications. All information will additionally be maintained within the electronic inventory control and management system. All physical copies of IPM applications will be maintained on-site and stored in fire-resistant containers for a period of five years.

Pinebrook Warren will maintain records of all pesticide, fertilizer, or other chemical applications for at least five years and will be made available to the Department upon request. Each of these application records will include the following information: a) Date and time of application; b) Stage of cultivation process; c) Date when the plants in the application area were moved to the flowering stage, if applicable; d) United States Environmental Protection Agency registration number, if applicable; e) Analysis of the fertilizer applied; f) Application site, which shall be identified by the location legend; g) Name of the product being applied; h) Amount applied; i) Unique plant identifier or other information that identifies which plants received the application; j) Size of the application area; k) Name of individual making the application; and l) Comments or special conditions related to the application.

Pesticide application records will be completed within 24 hours upon application completion at Pinebrook Warren. All records will be made available upon request to the Department or its authorized agents and medical personnel or first responders in an emergency. Records will also be made available to the Michigan Department of Agriculture upon request.

Pinebrook Warren will comply with any future regulations provided by the Michigan Department of Agriculture, acting with the cooperation of the Department, that establish a quarantine to prevent the dissemination of plant pests within this State or to prevent or delay the introduction of a plant pest into this State from any country, state or territory. If no such order is provided by any department, Pinebrook Warren will upon finding a plant pest in a facility that has the potential to cause severe damage to other cultivation operations and processors or to agriculture in general, will enact a quarantine order. The quarantine order will establish conditions and restrictions determined to be necessary to prevent or reduce the movement of the plant pest from the quarantined area. Vehicles or any means of conveyance suspected of carrying the plant pest may also be subject to quarantine and a treatment order may be issued as necessary to eradicate the plant pest. The quarantine order may regulate the planting, growing or harvesting of any immature cannabis plants or medical cannabis plants that serve as a host or reservoir for the plant pest within the quarantined area and may include prohibiting the processing of a specific batch of cannabis within a specific geographic area or during a specified time. An immature cannabis plant or cannabis plant suspected of harboring the plant pest may be ordered to be treated or destroyed. Pinebrook Warren will record the batch number, weight, and strain name associated with each batch that has been quarantined for testing or ready to be distributed to a processor or dispensary.

Pinebrook Warren will dispose of all unused pesticides, fertilizers, and other chemicals according to all state and federal laws and regulations, which require compliance with all directions on the product label. Additionally, our SOPs prohibit the use of a pesticide, fertilizer, or other chemical that is inconsistent with the product's label or in violation of the Administrative Code.

Quarantine of Infected Plants: In the event that disease, mold, mildew, rot, or pest infestation are detected in plant roots, grow medium, stems, stalks, leaves, or flowers, all infected plant or plant material shall be immediately removed, quarantined, treated, and/or destroyed, and rendered unusable. Pinebrook Warren has a separate and secure area for the temporary storage of marijuana and/or marijuana product that is awaiting disposal, pursuant to the Marijuana Acts. Pinebrook Warren only processes marijuana plants in a safe and sanitary manner. Proper sanitation is maintained in the Facility and its various areas, and proper rodent, bird, and pest exclusion practices are continuously employed. If there is an outbreak of mold or botrytis, Pinebrook Warren Cultivation staff shall employ methods to prevent the spread of additional spores in the environment. Infected plants are identified, bagged and sealed. Cultivation staff inside the particular room shall tie the bag up, spray it with a hydrogen peroxide solution, and hand it off to a Cultivation staff who is not contaminated, not standing inside the room, and then that Facility staff member shall move the bag into the quarantine room, and dispose of it as specified in the Facility-specific SOPs.

Safety Protocols for Employees: General guidelines regarding our facility and safety are outlined in the Employee Manual and must be understood by all employees. Specific training modules are outlined in this manual. The manual will also outline some specifics regarding General Policies, including: Scheduling and Reporting to Work, Timekeeping Procedures, Parking, Personal Belonging, Cell Phones, Personal Appearance and Dress Code, Breaks/Meal Periods, Smoking Policy,

Computer/Internet Usage, Complaint Procedure, Community Cleaning Schedule Each Facility's manuals will also outline some specifics regarding Safety requirements, including:

- Personal Protective Equipment (PPE)
- Chemical Safety
- Fire Safety Plan
- Evacuation Plan and Power Outage
- Employee Requiring Medical Attention

Health and Safety: All employees, customers and their caregivers, and escorted visitors in its Facility are dependent on Pinebrook Warren to ensure and maintain their health and safety. Pinebrook Warren has a positive relationship with the local law enforcement agency, fire department, emergency medical services and has developed pertinent safety standards, protocols and training. In addition, employing security guards, conducting timely maintenance of the Facility and all equipment, installation of safety and health related equipment, issuance of personnel protective equipment, and employee training will maximize Pinebrook Warren's ability to maintain the health and safety of the Facility and Facility Premises.

Medical Emergency: The employees shall be trained in worksite safety to ensure employees will be able to identify hazards that could cause injury. Each employee will be responsible and accountable for maintaining a safe worksite. This training includes intended and proper use of all equipment and chemicals, proper storage in order to not cause inadvertent injury to themselves and others, not to leave objects, water hoses, and other items in walkways that could be tripping hazards, chemicals to be clearly marked, used, and stored as indicated by the relating Material Safety, data sheet (MSDS), first aid training by an instructor certified

Fire: Pinebrook Warren shall take all reasonable and necessary measures to reduce, if not eliminate, the possibility and impact of fire in the Facility. Pinebrook Warren shall ensure that all employees receive fire prevention and safety training from the local fire department. Each employee will be responsible and accountable for fire prevention and safety. An individual personal protective equipment, including protective eye wear and masks, a knife or other cutting implement, flashlight, note pad and writing implement, and any other equipment recommended by the fire department is available for each employee. Pinebrook Warren will conduct regular fire drills to ensure the employees are proficient at evacuating the Facility. All employees must report all observed fire hazards to the manager's manager as soon as they are identified. The managers shall remove the hazards as soon as possible. In event of fire the fire alarm will be pulled, 911 will be called, the managers will be notified immediately, and the Facility will be evacuated.

Chemical Spill: Pinebrook Warren is committed to eliminating the possibility of chemical spills. In order to minimize the occurrence of chemical spills, Pinebrook Warren will ensure that all chemicals will be used only for their intended purposes. All chemicals will be stored in lockable cabinets and/or on shelves that are firmly secured in place to prevent movement or overturning. Areas in the Facility where chemicals are used must be adequately ventilated. Pinebrook Warren requires that all employees attend chemical spill prevention and safety training provided by the local fire department. Each employee will be responsible and accountable for the prevention of chemical spills. Training includes information on how to maintain a safe and hazard free workplace, the proper storage of chemicals, identifying the impact and toxicity levels for each chemical used in the Facility, proper precautions for the use of each of the chemicals, remediation, clean up, and disposal procedures for each type of chemical spill, and recognizing when hazardous materials remediation professionals should be called

to the Facility. Pinebrook Warren will maintain current Material Safety Data Sheets (MSDS) for each chemical located and used in the Facility in identifiable three-ring binders. The MSDS binders are located in appropriate locations in each Facility. Pinebrook Warren shall conduct regular chemical spill drills to ensure the employees are proficient at evacuating the respective Facility. In event of a chemical spill the employees will notify the managers and assess the situation. In those instances, when the employees are properly trained and equipped, remediation, clean up, and disposal procedures will commence. If the situation overwhelms the employees' training and equipment, 911 will be called. Please note: Specific training details are outlined below.

Equipment: Each piece of critical apparatus (equipment) will have a unique number/identifier (may be a name) which will be entered on the Equipment List. This Equipment List will also be entered into the POS for purposes of cost analysis as well as electronic tracking of maintenance. When equipment is serviced by contracted service specialists, the actions they take with respect to the equipment must be included in the Log. The staff member responsible for the service specialist while on the premise will enter information on the contractor's behalf.

For all incoming equipment, a New Equipment Receipt is required. Once logged, the employee will place the equipment in the area where it is to be used. They will subsequently log the equipment in the Equipment List and assign the Equipment Identifier. Routine Preventative Maintenance ("PM") and limited service will be carried out by Pinebrook Warren, state agencies, and/or the equipment's manufacturer, where applicable. The assigned manager will maintain service manuals and maintenance records. The assigned manager will administer the equipment maintenance program.

Two types of service contracts are maintained on Major Equipment: Fixed contracts for equipment that requires maintenance visits which a manager will schedule based upon the service agreement or standing agreements for equipment that requires service on an as-required basis. This is typically for equipment that can be routinely maintained by the staff. In these cases, rare or unique failures will require manufacturer's service on a per-call basis. At that time, appropriate staff will observe and assist to improve their diagnostic and repair capabilities for future issues. They will document all learned activity to add to the SOPs. Each time PM is performed it is documented in the Equipment Log and signed by the manager.

If equipment is known or suspected of not performing to its intended function, the equipment shall be tagged "Out of Service". The reason that the equipment was removed from service is documented in the Equipment Log, the manager is notified of the equipment status, and a ticket number will be assigned to the issue. The actions and steps taken to restore the equipment to operational status are documented in the Equipment Log including repairs made by contractors, and specific details regarding the work performed. The manager will review the documentation and close the ticket to indicate approval. The equipment can then be put back into service by removing the Out of Service Sign.

If equipment is to be decommissioned, the reason is documented in the Equipment Log, reported to the manager for review, and a ticket number created. The manager will review the details, determine how to proceed, and close the ticket accordingly. The manager is responsible for ensuring new equipment is ordered to replace any critical decommissioned item.

The Major Equipment is defined as per the Equipment List. The maintenance of Major Equipment such as the water system is defined in the SOPs. The maintenance of the HVAC, POS, Packaging and

Labeling Machine and other large/high cost items are defined in the SOPs. Major Equipment failure must be carefully logged, documented and reported. This data will be provided to the manager as well as owners for evaluation of procedures to ensure best practices are followed to prevent future Major Equipment failure. These costs will be monitored and weighed against the performance evaluations of the entire cultivation team. Pinebrook Warren will maintain records of equipment, its use, maintenance, and replacement.

SOP Documentation: Pinebrook Warren will submit any proposed changes to its plan to the Department for approval. All changes must be approved by the CEO. A determination is made by the department leader whether manuals will be reprinted and distributed at the time of change, depending of the impact of the change. The date the updated was disseminated to appropriate staff is noted in the last column.

Pursuant to the Department Administrative Rule §420.18 (Changes to licensed marijuana facility), Pinebrook Warren understands any change or modification to the marijuana facility after licensure requires the approval of the Department before any changes or modification are made.

Security Plan

Security Mission: The Marijuana Acts establish a marijuana program; providing for customer and certification for marijuana organizations. The purpose of these Acts are to allow the beneficial use of marijuana in a regulated system.

Security Feature Diagram: See Exhibit A.

Pinebrook Warren recognizes the impact a marijuana grower facility has on the surrounding community and businesses and has developed a physical security plan to minimize any negative concerns. Pursuant to the Marijuana Acts, including the Department's Administrative Rule §420.209, Security measures; required plan; video surveillance system, Pinebrook Warren's Security Plan outlined below demonstrates, at a minimum, the ability to meet the requirements of the Marijuana Acts. To ensure the safety, security, and integrity of the operation of our grower and cultivation facility, all operations shall be within a building that meets the security requirements, permits and passes inspections provided for in the Marijuana Acts.

Pinebrook Warren's physical security mission is to cultivate marijuana using the highest standards for quality products and public safety with the goal of assisting Customers with alleviating symptoms of debilitating health conditions that warrant the administration of medical marijuana. Every aspect of the company's operation will have a strong emphasis on security and preventing the diversion of marijuana. Pinebrook Warren positions itself as an industry security leader by working with the community to further improve security policies and procedures and will serve as a model for other marijuana businesses.

Pinebrook Warren's Physical Security Plan is intended to comply fully with all the Marijuana Acts including all requirements of Michigan state law, and all rules and regulations of the Department. Pinebrook Warren recognizes that the Department's regulations are likely to be revised or updated from time to time, as the marijuana industry further develops in Michigan, and based on experience and inputs from industry stakeholders and the public. Pinebrook Warren continually monitors changes

in the laws, rules, and regulations so as to be able to update this Security Plan and keep it current with all applicable requirements. The Co-location Grower and Cultivation Facility senior management oversees compliance of the facility's physical security program with the requirements of the act and rules.

Building and fire safety: Pursuant to the Department's Administrative Rule §420.208 Building and Fire Safety, Pinebrook Warren understands that the Facility may be subject to inspection by a state building code official, state fire official, or code enforcement official to confirm that no health or safety concerns are present. The Department or its authorized agents, state building code official, or his or her authorized designee may conduct pre-licensure and post-licensure inspections of the Facility. Pinebrook Warren will not operate a cannabis Grower Facility unless the proposed Facility has passed pre-licensure fire safety inspection by the Bureau of Fire Services (BFS). Pinebrook Warren is ready willing and able to ensure a BFS inspection may be conducted at any reasonable time to ensure fire safety compliance. A BFS inspection may be annual or biannual and result in the required installation of fire suppression devices or other means necessary for adequate fire safety pursuant to state standards. Pinebrook Warren will comply with the following:

- BFS may require cannabis facilities to obtain operational permits, including but not limited to, carbon dioxide systems used in beverage dispensing applications, amended for cultivation use and extraction, compressed gases, combustible fibers, flammable and combustible liquids, fumigation and insecticidal fogging, hazardous materials, high piled storage (high rack system cultivation), and liquefied petroleum (LP) gas.
- For specific installation or systems, BFS may require facilities to obtain construction permits, including but not limited to, building construction, electrical, mechanical, compressed gases, flammable and combustible liquids, hazardous materials, LP gas, automatic fire extinguishing/suppression systems, fire alarm and detections systems, and related equipment found during fire safety inspections.

Pinebrook Warren shall welcome the Department or its authorized agents, or state fire marshal or his or her authorized designee to enter and inspect the Facility at any reasonable time. In addition to any inspections, Pinebrook Warren understands fire safety inspections are required if any of the following occur:

- Modifications to the grow areas, rooms and storage within a marijuana facility.
- Changes in occupancy
- Material changes to a new or existing grower facility including changes made pre-licensure and post-licensure
- Changes in grow areas and building structures may trigger a new inspection

Video Surveillance: Pinebrook Warren has contracted a professional licensed third-party video surveillance company, to install all video equipment and maintenance of equipment at the Co-location Grower and Cultivation Facility. Pinebrook Warren uses security and surveillance systems, utilizing commercial grade equipment. This system is designed to prevent unauthorized entry and to prevent and detect diversion, theft or loss of medical marijuana. The Facility uses a professionally monitored sophisticated high-definition surveillance system that records all activity in images capable of clearly revealing facial detail. Pinebrook Warren shall designate and

train employees to continuously monitor the security system and surveillance system at the Facility. This monitoring employee on duty will communicate to senior management any unusual occurrences. The video recordings will also be sent electronically to an off-site cloud-based storage site. The amount of storage needed for both the NVR and cloud system will depend on various factors such as several cameras needed; megapixels of the camera and frame rate needed to secure the Facility.

Pinebrook Warren has a video surveillance system that consists of digital or network video recorders, cameras capable of meeting the recording requirements in the Marijuana Acts, including video monitors, digital archiving devices, and a color printer capable of delivering still photos. The video surveillance system will include:

Power Source: Pinebrook Warren contracted with a licensed power source company to purchase the appropriate backup power source system to maintain normal video surveillance activity for up to 48 hours. The video surveillance systems is equipped with an uninterruptible power supply (UPS) synchronized with a compatible high-output generator to provide a seamless transition from main power to auxiliary power in the event of a power outage. In the event of a system failure, an immediate alert will be provided via email and text message to management by the system.

Cameras: Pinebrook Warren uses fixed camera placement and line of sight at the Facility which allows for a clear image of all individuals and activities in and around the following:

- Any areas where marijuana products are weighed, packed, stored, loaded, and unloaded for transportation, prepared, or moved within the marijuana facility
- Limited-access areas and security rooms
- Transfers between rooms
- Areas storing a surveillance system storage device with at least 1 camera recording the access points to the secured surveillance recording area
- All entrances and exits to the building will be recorded from both indoor and outdoor vantage points
- The areas of entrance and exit between marijuana facilities at the same location if applicable, including any transfers between marijuana facilities.
- All rooms with exterior windows, exterior walls, roof hatches, or skylights and storage rooms, including those that contain medical marijuana and safes.
- Cameras will be placed on the exterior of the building to allow for 100% coverage of the uncontrolled area and at least twenty (20) feet from the exterior of the perimeter of the Facility.

The security video surveillance system will be equipped with three different types of Internet Protocol (IP) cameras:

1) Dome model cameras for the interior of the Facility

2) 360-degree series cameras in the plant growing areas

3) Bullet cameras for outdoor use

Internet protocol (IP) cameras are digital video cameras commonly employed for surveillance, and which, unlike analog closed circuit television (CCTV) cameras, can send and receive data via a computer network and the Internet.

Specification of IP Cameras:

1. At least 3 megapixel CMOS sensor - Megapixel digital images are made up of thousands of tiny, tile-like picture elements.
2. At least 1080 Resolution – Resolution is a set of high-definition video modes characterized by 1080 horizontal lines of vertical resolution
3. At least 30 Frames per Second – FPS is the frequency (rate) at which an imaging device displays consecutive images called frames.

When transmitted at three megapixels per frame, IP cameras provides about five times as many pixels as standard-definition cameras. This produces a clearer picture due to progressive scanning. All cameras will have a built-in IR illuminators, effective up to 30 Meters, Smart IR technology to avoid overexposure and wide dynamic range enhancement for visibility in extremely bright and dark

environments.

Each camera is installed to be permanently mounted and in a fixed location that allows the camera to clearly record activity occurring within 20 feet of all points of entry and exit on the facility. The surveillance system's cameras allow for the clear and certain identification of any person, including facial features, activities, including sales or transfers, in all areas outlined above, license plates, and vehicles. Motion activated lighting will be installed to enable proper surveillance during hours of darkness at all entry points and where all exterior cameras are located.

Cameras are installed at a height that provides an optimal vantage point to allow a clear image of all individuals and activities around the building. This line of sight coverage includes all entrances and exits to the Facility from both indoor and outdoor points. The system operates under normal lighting conditions for each area.

Cameras in the main entrance vestibule record individuals every time they enter the Facility, and the Network Video Recorder (NVR) will take photos from these recordings, so that up-to-date photos of employees, vendors and visitors are maintained. The cameras covering any areas with marijuana will be capable of recording and identifying the employee's actions, any information on the computer or monitor. The video system records continuously 24 hours per day and produces a clear, color, still image in a digital format and clearly, display the time and date on the video. The date and time will synchronize with the correct time and not significantly obscure the picture.

Surveillance video is recorded 24 hours per day, 7 days per week and all video recordings will clearly and accurately display the correct date and time. The video surveillance system is equipped with a failure notification system that provides notification to Pinebrook Warren of any interruption or failure of the video surveillance system.

Network Video Recorder (NVR) Device: The Facility's security system uses a 64 channel IP Network Video Recorder (NVR) which functions as the security system's central hub. An NVR is a software program device that records video from cameras in a digital format to a disk drive, USB flash drive, standard-definition memory card or other mass storage device.

The NVR is remotely accessible at all times through a secure web portal for management and law enforcement use. Remote accessibility will permit management to view live footage and review security logs from the Facility at any time. This will allow management and local law enforcement to verify that Pinebrook Warren is following all applicable security and procedural requirements at will.

This video surveillance system is Internet Protocol (IP) compatible and will record activities on the premises and around the perimeter of the premises at all times as described above. Pinebrook Warren's NVR allows the export of still clear color digital images in industry-standard image formats, including .jpg, .bmp, and .gif. The NVR will automatically archive exported surveillance footage in a proprietary format that ensures authentication of the video and guarantees that no alteration of the recorded image has taken place. The exported footage is archived in an industry-standard file format that can be viewed on a standard computer operating system. Even though the NVR will automatically store all recordings and electronic security logs, this information is also backed up and stored on a cloud-based server. The video surveillance system will have the ability to record all images captured by each surveillance camera for a minimum of 4 years in a format that will be easily accessed for investigative purposes.

Hard-drive Rack Mountable Servers:

The system will use removable hard-drives rack mountable servers with up to 64TB of storage each on board for long time storage. Software access controls and logs protect the system on which surveillance recordings are stored in a manner to protect the recording from unauthorized tampering or theft and allow management review of all system access and access attempts. The system will store video clips using several proprietary derivative compressed video format which cannot be edited or altered. The video compression efficiency makes it ideal for remote video transmission over affordable broadband. Efficient video compression rate also allows the same number of days of voice storage using less than half the hard drive space required by leading competitors.

The surveillance recordings will be kept at the Facility in a locked cabinet, closet or another secure place for a minimum of 14 days, except for in instances of investigation or inspection by the Department, through its investigators, agents, auditors, or the state police, in which case Pinebrook Warren shall retain the recordings until the Department notifies Pinebrook Warren that the recordings may be destroyed. Pinebrook Warren shall maintain a log of the recordings, which includes the identities of the employee or employees responsible for monitoring the video surveillance system; the employee who removed the recording from the video surveillance system storage device and the time and date removed; and the employee who destroyed any recording. The video surveillance room will have limited access to authorized individuals and secured by a security alarm system separate from the site's primary security system. The alarm monitoring location will not be at the Facility but at a location approved by the Department.

The systems shall be inspected, and all devices tested once every year by a qualified alarm system vendor and qualified surveillance system vendor which has been approved by the Department. Pinebrook Warren will also conduct maintenance inspections once a month and ensure that all necessary repairs, alterations, and upgrades are made for the proper operation of the systems. Pinebrook Warren acknowledges all surveillance recordings are subject to inspection by the Department, through its investigators, agents, auditors, or the state police, and shall be kept in a manner that allows the Department to view and obtain copies of the recordings at the Facility immediately upon request. Pinebrook Warren shall also send or otherwise provide copies of the recordings to the Department upon request. All inspections, assessments, servicing, alteration and upgrade documentations will be maintained for a period of at least 4 years and made available to the Department or its authorized representatives within the time requested.

The security equipment will be installed in the security room, where it is protected from tampering or theft. This security equipment room will house the following equipment: an NVR, three 24" call-up monitors for security feeds, a computer (one call-up monitor will double as the computer monitor), a color printer, video playback equipment, a master intercom, a phone, a panic button and a lockable case for portable equipment. Access to the security equipment room will be limited to essential employees, law enforcement, security system service employees, the Department or Department's authorized representatives and others when approved by the Department. Access to the security

equipment and computer will be password protected. Management will be required to safeguard this password by keeping it confidential and not writing it down in an area that could be accessed by others. All security system equipment and recordings shall be maintained in good working order in the security equipment room to prevent theft, loss, destruction or alteration.

A list of authorized employees and service personnel with access to the security equipment room will be maintained and frequently updated and will be made available to law enforcement upon request. The Facility will display 12" x 12" signs in high-risk areas, entrances and exits as well as in the parking areas with lettering no smaller than one inch in height reading:

"These Premises Are Under Constant Video Surveillance"

Facility Security Features: The Facility will have, and fully use, the following security features:

Lighting: All entrances and windows are fully illuminated during the hours of darkness to a minimum of 500 lux. Additionally, 1,000 lux motion activated lighting illuminate exterior doors and windows. All other areas around the Facility are illuminated at all times to the minimum necessary to facilitate video surveillance.

Locks and Doors:

1. All exterior doors and windows are secured against entrance or breakage.
2. All interior rooms, windows, and points of entry and exits are securely locked with commercial-grade, nonresidential door locks. Protected by category five, 16 gauge steel security doors that are rated for 60-minutes forced entry resistance. Locks are shielded with metal plates to prevent manipulation from the outside, and hinges are on the interior of the door to prevent the same.
3. All fire exits use an emergency door lock system to provide access control as well as be fire rated.
4. All entrances have keyed entry.
5. All roll up doors to ensure the prevention of criminal entry, bollards are inserted in front of roll up doors to make the approach and forcible breach by a vehicle impossible for would be invaders.
6. The Facility has an enclosed secure area out of public sight for the loading and unloading of marijuana into and from a transport vehicle.

Vault: The vault door attached to the structure will be a category five, 16 gauge steel security door.

Locks are shielded with metal plates to prevent manipulation from the outside, and hinges are on the interior of the door to prevent same.

Pinebrook Warren limits access to any room containing security and surveillance monitoring equipment to persons who are essential to maintaining security and surveillance operations, Federal, State and local law enforcement, security, and surveillance system service employees, the Department or its authorized agents, and other persons with the prior written approval of the Department. Pinebrook Warren keeps security and surveillance rooms locked at all times.

Each employee signs a confidentiality agreement, the breach of which shall be cause for immediate termination, and such confidentiality agreement, among other things, shall prohibit an employee from sharing their access proximity security card and/or pin code. Pinebrook Warren will make available to the Department or the Department's authorized agents, upon request, a current list of authorized employees and service employees of contractors who have access to any security and surveillance areas.

Access Procedure

Visitors or Vendors

- The Facility will not be open to the general public. Pinebrook Warren requires vendors, contractors, and other individuals requiring access to the facility for purposes regarding the growing, processing or testing of marijuana to sign a visitor log and wear a visitor identification badge that is visible to others at all times while on the site and in the facility.
- Authorized visitors or vendors must explain the reason for their visit.
- Valid proof of identification which must contain name, photograph, and date of birth, and must be one of the following:
  - (a) driver's license
  - (b) government-issued identification card
  - (c) military identification card
  - (d) passport

- At the entrance to the Facility, Pinebrook Warren conspicuously posts notices stating that access to the Facility premises is limited to employees or authorized visitors. These notices contain the following statements: ***"These Premises Are Under Constant Video Surveillance"***
- All Pinebrook Warren notices to the public will be at least 12" x 12" in size and will contain lettering no smaller than 1/2 inch in height.
- Pinebrook Warren's visitor/vendor log will contain the following information:
  - Badge Number, if applicable
  - First Name
  - Last Name
  - Propose of Visit
  - Areas of the Site / Facility Visited
  - Escort Name
  - Time of Arrival
  - Time of Departure

- Signature

- All visitors or vendors are given a visitor/vendor badge. A visitor must visibly wear the badge at all times while in any area of the Facility.
- All visitors or vendors are escorted by an authorized employee at all times when in the limited access areas of the Facility.
- At the conclusion of the visit, visitors or vendors will return the company visitor badge and sign out on the visitor log.
- Pinebrook Warren's visitor log will be available for inspection at all times. The visitor log will be maintained for 4 years and made available to the Department, State or local law enforcement, and other State or local government officials upon request if necessary, to perform the government official's functions and duties.
- Pinebrook Warren will never receive any consideration or compensation for allowing a visitor to enter the limited access area and the entire Facility.

Knox Box: A KNOX-BOX Rapid Entry System safe box has been wall-mounted at the front entrance and holds a building access keys for fire departments, emergency medical services, and police to retrieve in emergency situations. The Knox Box allows local emergency agencies to have access to master keys to the Facility so that they can quickly enter the Facility without having to force entry or find individual keys held in deposit at the station.

Security Equipment Review: The entire video surveillance system will be reviewed and inspected once a month by Pinebrook Warren and will make necessary repairs, alterations, and upgrades to ensure the proper operation of the system. In the event of an extended mechanical malfunction of the security or surveillance system, Pinebrook Warren will notify the Department immediately and with Department approval, provide alternative security that will include the closure of the Facility.

On an annual basis, Pinebrook Warren will undergo a full 360-degree full security risk assessment review by an outside marijuana security specialist, qualified alarm system and surveillance system contractors. A security recap will be submitted to management no later than 30 calendar days after the reviews have been conducted. In the event that any of these assessments identifies concerns related

to Pinebrook Warren's security procedures, the contractor will submit to management a plan to mitigate those concerns.

All inspections, assessments, servicing, alteration and upgrade documentations will be maintained for a period of at least 4 years and made available to the Department or its authorized representatives within the time requested.

Storage Overview

In order to remain compliant with the Marijuana Acts and the accompanying rules and regulations a Grower must describe plans regarding the storage of marijuana products within the Facilities. A major component of the Company's comprehensive security plan is the proper storage of marijuana at the Facility. Pinebrook Warren's Storage Plan is intended to comply fully with the Marijuana Acts to include the following:

- Pursuant to the Department's Administrative Rule §420.212. Storage of marijuana product, Pinebrook Warren shall store all marijuana products in a secured limited access area or restricted access area within the Grower Facility that will be identified and tracked consistently with the statewide monitoring system.
- The Facility shall have separate locked limited access areas for storage of marijuana that is expired, damaged, deteriorated, mislabeled, contaminated, recalled, or whose containers or packaging have been opened or breached until the product is destroyed or otherwise disposed of as required under the Department's Administrative Rule §420.211 (relating to disposal of marijuana).
- The Facility shall maintain all storage areas in a clean and orderly condition and free from infestation by insects, rodents, birds and pests.

The Company's senior management and security team will be tasked to oversee compliance of the Grower's storage of marijuana. Each area of the facility maintains strict guidance with our SOPs regarding storage. Since large areas of the Facility have plants in various stages of growth, each room must continually be monitored for safe and secure storage. As seeds are brought in for the initial cultivation they are inventoried and securely stored. When plants are moved from seedling to immature plant status, they are tracked and monitored for compliance in accountability. As plants move to maturity, are harvested, cured (dried) and processed, each step and area will be monitored by employees, management, and security to provide for accuracy and security in storage. During the final processing, through packaging and until the final marijuana product is delivered to licensed Retailers and processors, storage of the materials involved will continue to be tracked.

Storage Recordkeeping: All storage manifest and inventory records are kept utilizing Michigan's METRC system and a third party system, Flow Hub's Point of Sale (POS) and Inventory Management System. Flow Hub has developed the safest and most reliant business model for the industry. The Flow Hub Commercial System provides inventory and sales management solutions through a single platform while giving complete visibility to state regulatory agencies via the State Traceability System. The Flow Hub B2B model links growers, processors and Retailers together to ensure that the entire supply chain is monitored from seed-to-sale. Furthermore, each business links directly to the Michigan State's Tracking System to provide regulatory agencies with real-time compliance data. Flow Hub technology presents a user-friendly interface that streamlines the entire inventory process while providing alerts and reporting features that allow the Grower and State regulatory agencies to properly

monitor the activity and sales of marijuana and marijuana products. Users can integrate specific business logic, hardware environment, operating system and data migration into the Flow Hub System.

The secured inventory is reconciled with a physical inventory and the electronic inventory system at the close of business each week. This reconciliation will occur at least twice and be done by at least two different employees while those employees are inside the secure storage room. Any problem with this reconciliation will be immediately reported to a supervisor, who will take all appropriate steps up to and including reporting any criminal activity to the proper law enforcement agency.

The Company established inventory controls and procedures to conduct monthly inventory reviews and semi-annual comprehensive inventories of marijuana at its Facility. A written record has been created and maintained of each audit inventory which includes the date of the inventory, a summary of the inventory findings, and the names, signatures and titles or positions of the individuals who conducted the inventory.

Receiving Marijuana for Storage: All usable marijuana including initial inventory of seeds by the Facility are examined by the Master Grower upon receipt to ensure that the identity, strength, quality, and purity purported on the label are identical to the findings of the independent testing laboratory. The Company's Compliance Officer will also conduct inspections and surveillance of the secured storage areas as well as understand all compliance laws, rules and regulations when it comes to receiving and storing marijuana. In addition, the Compliance Officer serves as a resource providing technical assistance to Company's senior management in developing proper security storage procedures and processes to ensure compliance with all Marijuana Acts.

Only deliveries of marijuana whose qualities are identical to the findings of the independent testing laboratory will be accepted and offered for sale. Non-conforming marijuana will be immediately rejected and returned, or disposed of in accordance with the Company and Department disposal procedure.

The following will be the only acceptable procedure to accepting marijuana into the Grow Facility:

1. Whenever marijuana enters the Facility, the Company's Compliance Officer and at least one other trained employee will be present. All employees involved in receiving marijuana are fully trained on the Company's policy and procedures for accepting marijuana into the Facility.
2. All incoming marijuana purchases are only received in the area Transport area. This receiving location is under constant video surveillance and out of the view of the public.
3. Upon receipt of the marijuana, the Compliance Officer and designated trained employee will examine the marijuana to ensure they comply with all applicable Department rules and the Marijuana Acts. This examination includes that the marijuana meets all applicable standards of identity, strength, quality and "purity".
4. If marijuana is found to be out of compliance with any Department rules, the Marijuana Acts or Company policies, it will be immediately rejected and returned to the vendor or placed in the quarantine section of the Facility Secure Storage area until it can be returned, or disposed of in accordance with the Department's Administrative Rule §420.211.
5. If marijuana is accepted, all applicable data will be recorded by the Compliance Officer, or an employee they designate, immediately upon acceptance into the Company's inventory management system.

All marijuana being received by the Master Grower will require the following documentation before

being accepted into the Facility:

- A description of the marijuana acquired
- The individual and total weight of each strain will be verified by IM checking labels, packaging and the Purchase Order.
- The lot number of the marijuana Product as assigned by the delivering cultivation vendor.
- The official name and State identification number of the delivering marijuana establishment certificate seller. A copy of the identification number certificate will be retained with the transaction paperwork.
- The date of acquisition of the marijuana.

Accepted marijuana will then be immediately moved into the Secure Storage area. Only a supervisor of the Facility or a specially designated party (such as a Compliance Officer, inspecting officer or a third -party inventory reconciliation person) will be allowed access to either the secured storage room or a secured display while marijuana is being stored there. All removals and placements of marijuana from the secured storage room will be noted in the Secure Storage Tracking system.

Secured Storage Vault Room – Sanitation: All secured storage areas are maintained in a clean and orderly condition and free from infestation by insects, rodents, birds, and pests.

- Trash is properly removed from the secured storage room immediately
- Floors, walls, and ceilings are kept in good repair at all times
- Adequate protection against pests will be provided through the use of an integrated pest management practices and techniques that identify and manage pest problems, and the regular disposal of trash to prevent infestation. Any pest issue identified will be resolved immediately by a professional contractor.
- A checklist and/or report will be made of any maintenance activity, cleaning, sanitization, or inspection of any of these activities. This report or checklist will be kept in the appropriate physical or electronic file for a period of at least one year. The checklist will be reviewed each week by senior management to identify and correct any concerns of maintenance.
- The Company has engaged a professional Pest Control Management company to provide third-party accountability. This company maintains the exterior and interior of the Facility to ensure compliance with safety requirements by the Department.
- All chemicals or solvents are stored separately from marijuana products and kept in a locked storage area.

Secured Storage Vault Room – The Company's storage policies are designed to ensure that all marijuana is secure and safe from diversion. All marijuana which includes quarantine and pending disposable marijuana are kept in a vault.

Secured Storage Room - Storage and Disposal of compromised Marijuana – Quarantine: The Facility shall have a separate and secure area for temporary storage of marijuana that is awaiting disposal. The Facility will have separate locked limited access areas for storage of seeds, immature medical marijuana plants, marijuana plants and marijuana that is expired, damaged, deteriorated, mislabeled, contaminated, recalled or whose containers or packaging have been opened or breached until the seeds, immature marijuana plants, marijuana plants and marijuana is destroyed or otherwise

disposed of as required.

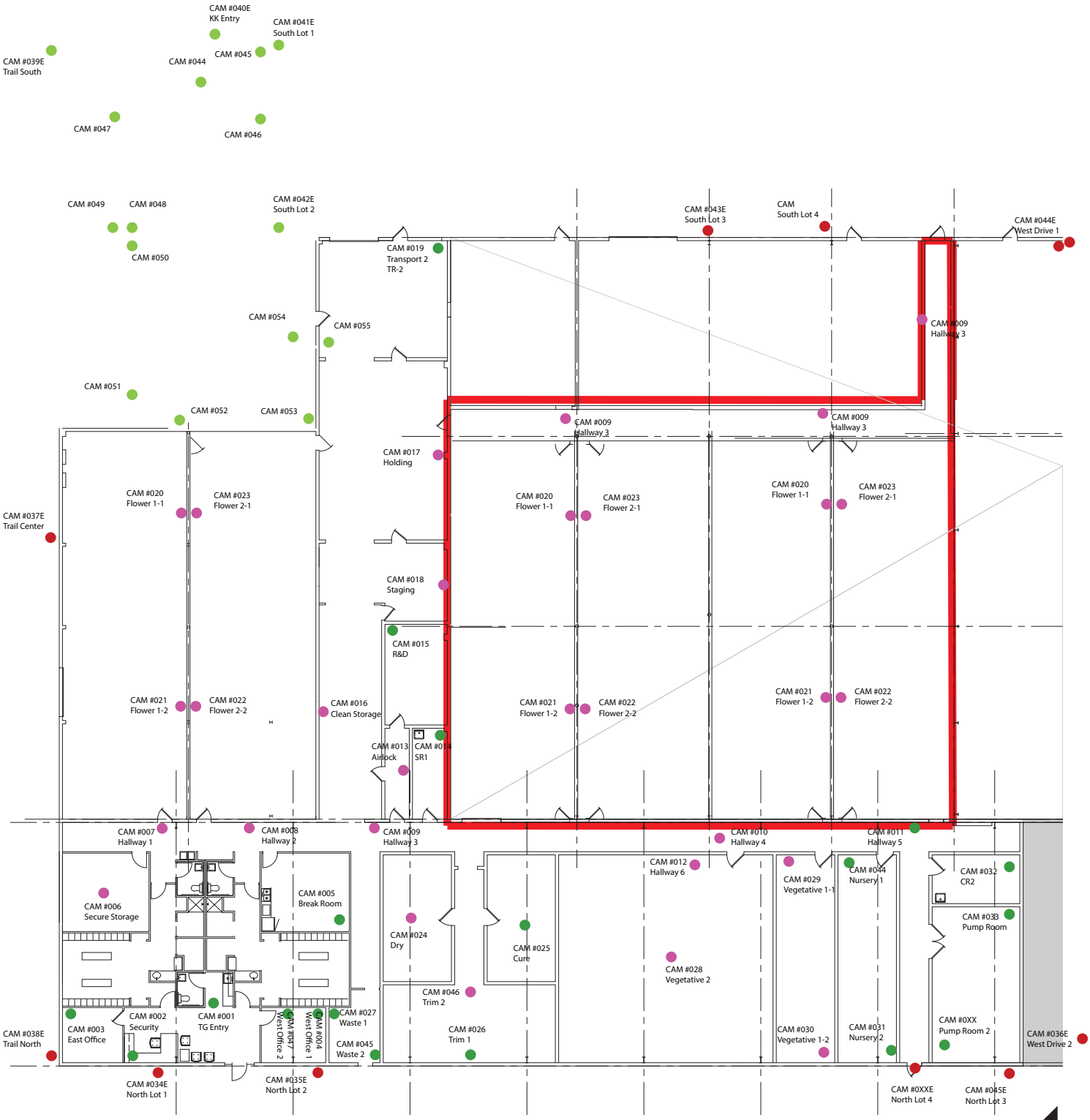
Once identified all marijuana that is expired, damaged, deteriorated, mislabeled, contaminated, recalled, or whose containers or packaging have been opened or breached is logged into the METRC tracking system as such:

- A description of and reason for the marijuana being disposed of
- Confirmation that the marijuana was rendered unusable before disposal
- Date of disposal
- The method of disposal
- The name and employee id number of the employee responsible for disposal.

Pinebrook Warren understands marijuana product that is to be destroyed or is considered waste must be rendered into an unusable and unrecognizable form and recorded in the statewide monitoring system, pursuant to the Department's Administrative Rules §420.211 and §420.212. Pinebrook Warren shall not sell marijuana waste or marijuana products that are to be destroyed, or that the Department orders to be destroyed. Pinebrook Warren shall manage all waste that is hazardous waste pursuant to the Marijuana Acts and specifically the Department's Administrative Rules §420.211. All marijuana or marijuana product that is expired, damaged, deteriorated, mislabeled, contaminated, recalled, or whose containers or packaging have been opened or breached will be disposed of in a manner in compliance with applicable state and local laws and regulations.

EXHIBIT A
SECURITY DIAGRAM

TRUGRO/KKIND
SECURITY CAMERA LAYOUT



8b. 1838 Nazareth Road, Consumers Energy, Site Plan Review

MCKENNA

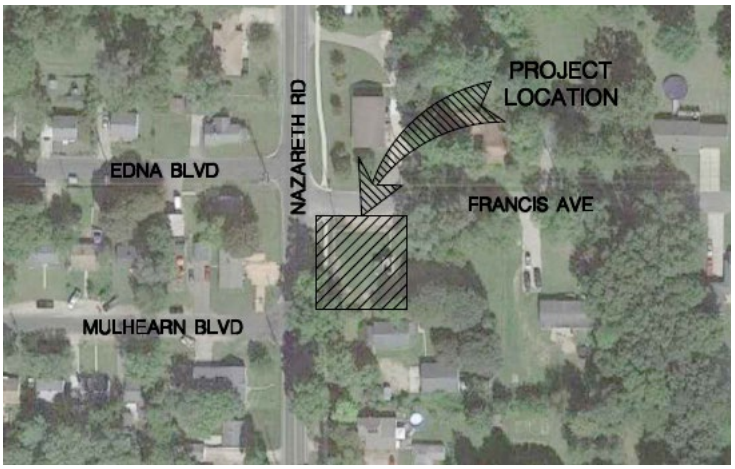
Memorandum

TO: Courtney Killeen, Consumers Energy
Paul Lippens, AICP, Vice President
FROM: Danielle Bouchard, Senior Planner
Kyle Mucha, AICP, Senior Planner
SUBJECT: **Site Plan Review #2 – Nazareth City Gate (Natural Gas Facility), 1838 Nazareth Road**
DATE: March 29, 2022

The applicant, Consumers Energy, is proposing to enhance a natural gas city gate facility, located on the east side of Nazareth Street, south of Francis Street. The subject site is zoned R-2, Single and Two-Family Residential. The property (PID: #06-12-435-490) is approximately 0.2 acres (8,800 square feet) in size.

OVERVIEW

The subject site is located on Nazareth Road, just south of Francis Avenue. The applicant, Consumers Energy, is proposing to enhance the existing site by constructing a new 40' x 40' x 13' building to assist with the natural gas operations on the site. The applicant also proposes to enhance the privacy fencing along the south and east sides. The site is used to reduce the gas pressure in the transmission line prior to delivery to surrounding neighborhoods.



PROPOSED IMPROVEMENTS

The proposed improvements to the site facility include: installation of new piping, valves, filter separator and heater; construction of a 40' x 40' x 13' steel sided building; new concrete driveway/turn around that includes an ice melt system to limit snow plowing requirements; new vinyl privacy fencing along the south and east sides; limited site lighting to be activated during onsite work.

USE OF THE PROPERTY

The current use classification of the property, essential service, is not proposed to change. Essential services are principal permitted uses in the R-2, Single and Two-Family Residential District. The term "essential service" as defined by the Zoning Ordinance means: "*the erection, construction, alteration or maintenance by public utilities or Kalamazoo Township departments or commissions, of underground or overhead gas, electrical, steam or water transmission or distribution systems, collection, communication, supply or disposal systems, including poles, wires, mains, drains, sewers, pipes, conduits, cables, fire alarm boxes, police call boxes, traffic signals, hydrants, towers, telephone exchange and/or repeater buildings, electric substations and substation buildings, gas regulator stations and regulator buildings and other similar equipment and accessories in connection therewith (but not*

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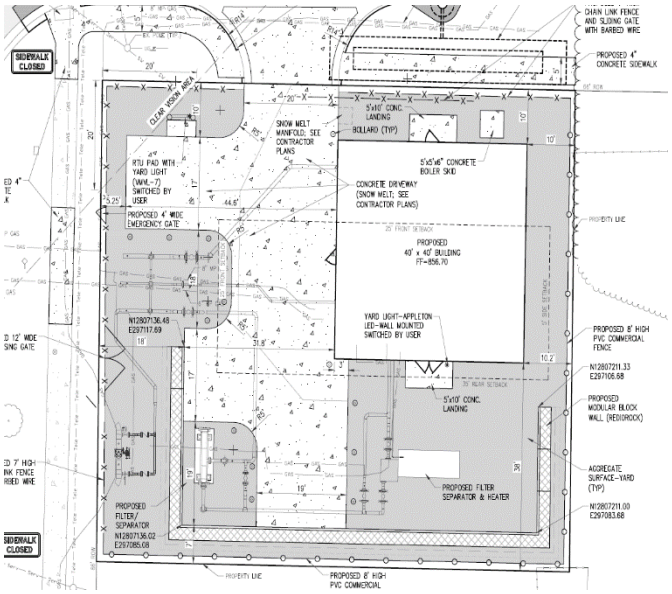
including any buildings except those expressly referred to herein), reasonably necessary for the furnishing of adequate service by such public utilities or Kalamazoo Township departments or commissions or for the public health or safety or general welfare."

EXISTING AND SURROUNDING CONDITIONS AND ZONING DISTRICTS

The site in its current state includes the following: gravel surface along Francis Avenue; piping and equipment, natural gas facility building and perimeter fencing. The site is used to distribute natural gas from the transmission system to the local neighborhoods by reducing gas pressures and is predominately automated, with little onsite labor needed.



The subject site is surrounded by R-2, Single and Two-Family Residential, zoned properties. The applicant has indicated that additional screening of the site facility will be provided to reduce the visual impact the new 40' x 40' building will have on the adjacent neighbors. In addition, the applicant has indicated that the proposed building will include a brick wainscot along the lower half.

SITE PLAN REVIEW

A. Floodplain

The site is not located within the floodplain.

B. Schedule of Regulations

The proposed construction of a 40' x 40' natural gas facility building is subject to the setback requirements of the R-2, Single and Two-Family District.

Setback	Requirement	Proposed Conditions	Meets Ordinance
Front	25'	10'	No
Side	5'	10'	Yes
Rear	35'	38'	Yes

The applicant has not met the minimum setback requirements for the front yard (Francis Avenue). However, Section 2.05 – Exceptions – of the Zoning Ordinance permits modifications to **essential service** regulations governing lot area, building or structure height, building or structure placement, and use of land in the Township when strict compliance with such regulations would not be practical or feasible.

Based on the limited size of the parcel (88' x 100'), we find that the placement of the natural gas facility building is acceptable and should have minimal impact on adjacent properties.

C. Landscaping Plan

In accordance with Section 5, Landscaping and Screening, of the Zoning Ordinance, the site is required to have the following landscaping:

1. General Site Landscaping: one tree per 3,000 square feet (deciduous or evergreen tree).
2. Landscaping adjacent to roads: one tree per 40 linear feet adjacent to roads (deciduous or evergreen); one tree per 100 linear feet (ornamental); eight shrubs per 40 linear feet.
3. Berms in front yard: one tree per 40 linear feet (deciduous or evergreen); one tree per 100 linear feet (ornamental); eight shrubs per 40 linear feet.
4. Greenbelts: one tree per 30 linear feet (deciduous or evergreen).
5. Landscape screening: landscaped screening shall consist of closely spaced (not more than 15 feet on center) evergreens, arranged to form a complete visual barrier within three years of planting.

The applicant has submitted a written landscaping exemption request, with the intent for the Planning Commission to approve a different standard given the site's proposed use and constraints. As per the applicant's letter dated March 28, 2022, it is stated that there are use restrictions placed upon the site by both Consumers Energy and Michigan Public Service Commission. Plantings and trees located within the proposed fenced area are a fire and safety hazard. Further, the site is too small to accommodate plantings or landscaping outside the fence. We defer to the Planning Commission to determine if the proposed lack of landscaping is appropriate for the site.

D. Lighting

The applicant indicates that site lighting will be "*full cutoff operated by switch by personnel when working on site."* Proposed lighting details have been submitted to the Township for review. The applicant proposed to utilize "area master generation 2 LED" lights. Township lighting standards note that light fixtures shall not exceed 0.5 footcandles at any property line. The proposed lighting plan does not appear to exceed this requirement. However, the light fixture does not appear to be properly shielded as per ordinance requirements.

Given that the proposed fixture will not likely cause light pollution issues on neighboring properties, we recommend that the applicant put the following note on site plans, "In the event that the lighting on the north side of the building impacts the neighboring property, the Site owner will remove or replace the light with a complying fixture."

E. Fencing

Section 6.01.C. stipulates screening wall and fence specifications along property lines that abut a lot in a residentially zoned district or a lot in any zoning district that is used for residential purposes. Utility buildings and substations are permitted a maximum fence height of eight (8) feet.

The applicant indicates that fencing will be installed along the entire site. An eight (8) foot vinyl fence will be installed along the south and east property lines. A seven (7) foot chain link, with three (3) strands of barbed wire will be installed along the west and north property lines. The site will be accessible by use of a 20-foot slide gate, located along the north property line.

We find the proposed fencing meets the intent of the ordinance.

F. Off-Street Parking

The parking requirements that pertain to "Public Utility Uses" most closely match the existing use.

Per Section 4.01.D.4, one (1) space for each employee on the largest daily work shift is required. Personnel and parking information include the following:

Number of Employees onsite – The proposed improvements will allow Consumers to remotely monitor / operate the facility using the remote telemetry unit. The site will not be regularly occupied by employees. Maintenance staff will periodically visit the site to maintain equipment. This generally occurs on a weekly basis. A normal site visit will include one employee driving one vehicle. Additional employees may be onsite to service equipment. There is space for parking up to three vehicles onsite which is sufficient for the employees working onsite.

Parking Spaces Provided – Due to the limited use of the facility, parking spaces are not delineated. Employees performing maintenance will bring work vehicles with them and park close to the area requiring maintenance to allow access to tools, etc. There is ample area available onsite to accommodate up to three vehicles.

The intended area for vehicle parking shall be noted on site plans.

G. Bike Parking

The proposed natural gas facility does not indicate any bike parking. Given the proposed use, we find that bike parking is likely not necessary on site.

H. Loading and Unloading

The site plan does not distinguish a loading and unloading area. Per Section 4.02.B.7: "*Establishments containing less than 5,000 square feet of gross floor area shall be provided with adequate off-street loading space that is accessible by motor vehicle, but which does not interfere with pedestrian or vehicular traffic.*"

The subject site is not anticipated to generate a need for off-street loading and unloading. The applicant indicates that a new concrete drive and turnaround area will be provided on site. We find that the concrete drive and turnaround will adequately support the proposed natural gas facility expansion due in part to the operation of the facility being primarily remote.

I. Stormwater

The Township Engineer has reviewed the proposed site plans. The Township Engineer finds the proposed site grading, stormwater, and drainage to be acceptable.

J. Agency Approvals

The applicant is required to obtain applicable approvals from other regulating agencies, including but not limited to EGLE, Kalamazoo County Road Commission, and the County Drain Commission.

K. Site Circulation

The site plan includes a new proposed point of ingress/egress fronting along Francis Avenue. The proposed driveway is 20 feet wide and a 20 foot clear vision area is noted on site plans. Section 2.20.D.4 of the Zoning Ordinance includes provisions relating to minimum driveway widths for commercial/office/industrial uses. While the proposed site is located in a residential district, the use is more industrial in nature. The minimum width for a "main access driveway" is 31 feet.

Due to the proximity of the proposed access drive to the intersection of Nazareth Road and Francis Avenue consideration should be given by the Road Commission of Kalamazoo County. We defer any additional comments regarding site access from a public roadway to the Road Commission of Kalamazoo County.

L. Sidewalks

The proposed site plan does not include sidewalks fronting Francis Avenue. The site does have public sidewalks along Nazareth Road (west side of property). Section 2.18.A states *"sidewalks shall be required in conjunction with all new development or change of use.* The plan notes removal and replacement of the

existing sidewalk; add the dimension of the sidewalk width to the section being replaced to verify the replacement will maintain a minimum width of 5 ft. and be consistent with the sections being removed.

M. Easements and Access Agreement
The site plan does not indicate any easements or access agreements.

N. Trash Removal and Disposal
The applicant indicates no refuse container will be needed for the site. The applicant further indicates that any refuse accumulation will be removed by maintenance personnel when visiting the site.

OTHER AGENCY REVIEWS

A. Township Fire Marshal
The Township Fire Marshal does not have comments at this time. The site is subject to review, inspection, and approval by the Township Fire Marshal once utilities are on site.

B. Township Engineer
The Township Engineer notes the following, *"We have received and reviewed the site plan for the Consumers Nazareth City Gate Reconstruct dated March 28, 2022, and find that the site grading and drainage plan is acceptable and should not increase the amount of stormwater runoff from the site. Consumers will need to obtain a permit from the Road Commission of Kalamazoo County for the proposed drive as well as the location of the proposed stormwater infiltration trench which is located in the public ROW."*

RECOMMENDATION

We recommend approval of the proposed site plan for 1838 Nazareth Road with the following conditions:

1. That the Planning Commission finds the proposed landscaping plan is adequate for the proposed use.
2. The applicant put the following note on site plans, "In the event that the lighting on the north side of the building impacts the neighboring property, the Site owner will remove or replace the light with a complying fixture."
3. The intended area for vehicle parking shall be noted on site plans.
4. The minimum width for a "main access driveway" is 31 feet.
5. Note the replacement sidewalk will be a minimum of 5 feet.
6. The applicant receives all necessary reviews and approvals from other applicable review agencies such as the Kalamazoo County Road Commission.

Feel free to reach out to Danielle Bouchard at dbouchard@mcka.com or Kyle Mucha, AICP at kmucha@mcka.com if you have any questions regarding this review.

Respectfully Submitted,

McKenna

Danielle Bouchard

Kyle Mucha

Danielle Bouchard
Senior Planner

Kyle Mucha, AICP
Senior Planner

Cc: Paul Lippens, AICP, Vice President

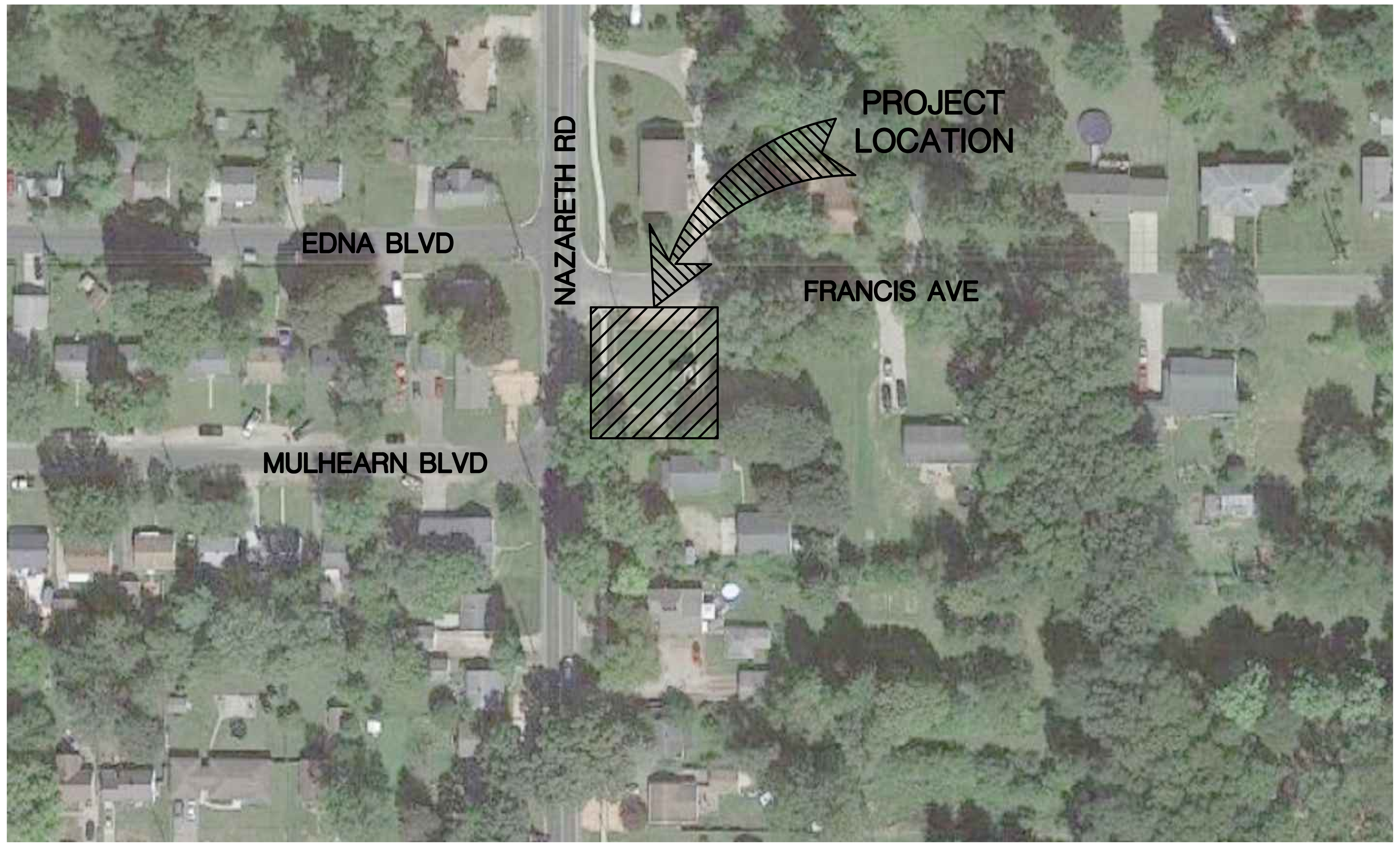
PROJECT SCOPE

PREPARE A SITE PLAN TO HELP OBTAIN ASSOCIATED PERMITS FOR THE RECONSTRUCTION OF THE KALAMAZOO / NAZARETH CITY GATE ON CONSUMERS ENERGY PROPERTY IN KALAMAZOO TOWNSHIP, MI. THE SCOPE OF WORK INCLUDES REMOVAL OF EXISTING PIPING/EQUIPMENT, BUILDING, FENCING AND THE CONSTRUCTION OF NEW FENCING AND NATURAL GAS PIPING/EQUIPMENT AND A NEW BUILDING.

SITE PLAN FOR

CONSUMERS ENERGY KALAMAZOO / NAZARETH CITY GATE RECONSTRUCT

SECTION 12 T2S-R11W
1838 NAZARETH ROAD
KALAMAZOO, MI 49048
KALAMAZOO TOWNSHIP, KALAMAZOO COUNTY



N
NOT TO SCALE

LOCAL AGENCY AND UTILITY INFORMATION

AGENCY	UTILITY
CHARTER TOWNSHIP OF KALAMAZOO 1720 RIVERVIEW DRIVE KALAMAZOO, MI 49004 (269) 381-8080	SITE PLAN
ROAD COMMISSION OF KALAMAZOO COUNTY 3801 EAST KILGORE ROAD KALAMAZOO, MI 49001 (269) 381-3171	ROAD DRIVEWAY
KALAMAZOO COUNTY OFFICE OF DRAIN COMMISSIONER 201 WEST KALAMAZOO AVENUE, RM. 107 KALAMAZOO, MI 49007 (267) 384-8117	SESC STORMWATER

SHEET INDEX

C-1324-PMT – 1 COVER SHEET
C-1324-PMT – 2 GENERAL NOTES
C-1324-SPL – 3 GRADING & SESC SHEET
C-1324-PMT – 4 SITE PLAN SHEET
C-1324-SAD – 5 DETAIL SHEET
C-1324-SAD – 6 DETAIL SHEET
C-1324-PMT – 7 EXISTING SURVEY & REMOVALS
C-1324-SAD – 8 FRAMING PLAN
C-1324-SAD – 9 ARCHITECTURAL ELEVATIONS
C-1324-SAD – 10 ARCHITECTURAL ELEVATIONS

LEGAL DESCRIPTION

4288680 3906 12 435 490 SUPERVISORS PLAT OF WASHBURN ACRES N 88 FT OF W 100 FT OF LOT 49. 0.2 ACRES

OWNER INFORMATION

CONSUMERS ENERGY
1945 W PARNALL ROAD
JACKSON, MI 49201
(269) 308-2800
ANTHONY STEPKE, P.E.

ENGINEER INFORMATION

ROWE PROFESSIONAL SERVICES COMPANY
540 S. SAGINAW ST, SUITE 200
FLINT, MI 48502
(810) 341-7500
DOUGLAS SCOTT, P.E.

ORIGINAL DRAWING #

STATE OF MICHIGAN
Douglas A. Scott
License No. 6201042673
LICENSED PROFESSIONAL ENGINEER
3/2/22

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CAUTION
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REFERENCE DRAWINGS NUMBERS	REV.	PROJECT #	DATE	DESCRIPTION	DR	CK	DES. APP.	ENG. APP.	CO	REV.	PROJECT #	DATE	DESCRIPTION	DR	CK	DES. APP.	ENG. APP.	CO
												03/28/22	REVISED PER TWP	JAM	DAS	DAS		
												03/04/22	SITE PLAN SUBMITTAL	JAM	DAS	DAS		

DRAWN J. MILLER DATE MAR 2022
CHECKED K. LAMBERT DATE MAR 2022
DESIGNED J. MILLER DATE MAR 2022
DESIGN APPROVAL D. SCOTT DATE MAR 2022
ENGINEER APPROVAL S. TESSMAR DATE MAR 2022

ROWE PROFESSIONAL SERVICES COMPANY

Consumers Energy
Count on Us®
GEO-SPATIAL & GAS ASSET MANAGEMENT
JACKSON, MI

FILE: 401300C1324-PMT.002.dgn
RASTER FILE:
SCALE NO SCALE
DO NOT SCALE DRAWING USE DIMENSIONS ONLY

KALAMAZOO / NAZARETH CITY GATE 2022 RECONSTRUCTION

COVER SHEET

FIELD AREA:
PROJECT # 21C0265
STA. NO. K-2
DRAWING NO. C-1324-PMT
SHEET 1
REV

PLOT @

GENERAL CONSTRUCTION NOTES

EMERGENCY CONTACTS
BEFORE BEGINNING WORK ON THE PROJECT, THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH THE NAMES AND TELEPHONE NUMBERS OF EMERGENCY CONTACTS. AT LEAST ONE PERSON REPRESENTING THE CONTRACTOR SHALL BE AVAILABLE TO RESPOND TO EMERGENCIES THROUGHOUT THE LIFE OF THE PROJECT, 24 HOURS A DAY, 7 DAYS A WEEK.

UNDERGROUND UTILITY IDENTIFICATION AND LOCATION
THE CONTRACTOR SHALL CALL MISS DIG (811) A MINIMUM OF THREE WORK DAYS IN ADVANCE OF BEGINNING EXCAVATION. THE CONTRACTOR IS RESPONSIBLE TO IDENTIFY AND NOTIFY UTILITY AGENCIES WITHIN THE PROJECT AREA WHICH DO NOT PARTICIPATE IN THE MISS DIG NOTIFICATION PROGRAM.

PUBLIC UTILITIES
EXISTING UTILITIES ARE SHOWN BASED UPON RECORDS AND LOCATIONS PROVIDED BY UTILITY AGENCIES. THE INFORMATION SHOWN IS CONSIDERED APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR. UNLESS THE PLANS SPECIFICALLY SHOW THAT EXISTING UTILITIES ARE TO BE MOVED, THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN EXISTING UTILITIES.

VERIFICATION OF UNDERGROUND UTILITIES
THE CONTRACTOR SHALL EXCAVATE AND LOCATE ALL EXISTING UTILITIES IN THE PROJECT AREA IN ADVANCE OF CONSTRUCTION TO VERIFY THEIR ACTUAL LOCATION. POTENTIAL CONFLICTS SHALL BE REPORTED TO THE ENGINEER. THE CONTRACTOR SHALL MAKE SUCH CHANGES TO GRADE AND ALIGNMENT OF PROPOSED WORK AS DIRECTED BY THE ENGINEER TO AVOID CONFLICTS, AT NO INCREASE IN COST TO THE OWNER.

UTILITY SERVICE
UNLESS SPECIFICALLY PROVIDED OTHERWISE IN THE CONTRACT DOCUMENTS, ALL EXISTING UTILITIES ARE TO REMAIN IN SERVICE DURING THE PROJECT.

SOIL BORINGS / PAVEMENT CORES
IF PROVIDED ON THE PLANS OR IN THE CONTRACT DOCUMENTS, LOGS OF SOIL BORINGS OR PAVEMENT CORES REPRESENT THE SUBSURFACE CONDITIONS ENCOUNTERED AT SPECIFIC POINTS. THE INFORMATION IS PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY.

MAINTAINING TRAFFIC
LOCAL AND EMERGENCY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES WITHIN THE PROJECT AREA.

WHEN EXCAVATION, FRESH CONCRETE, OR OTHER CONSTRUCTION WORK WILL RESULT IN THE CLOSURE OF A STREET OR DRIVEWAY FOR A PERIOD OF TIME, THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL AFFECTED RESIDENTS AND BUSINESSES IN ADVANCE.

THE CONTRACTOR SHALL NOTIFY EMERGENCY RESPONSE AGENCIES IN ADVANCE OF ROAD CLOSURES OR THE ESTABLISHMENT OF DETOURS.

TRAFFIC SIGNS
TRAFFIC SIGNS WHICH INTERFERE WITH CONSTRUCTION SHALL BE REMOVED AND REPLACED BY THE AGENCY HAVING JURISDICTION OVER THE STREETS OR ROADS IN THE PROJECT AREA. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE AGENCY TO ARRANGE FOR REMOVAL OF THE SIGN AND IS RESPONSIBLE TO PAY ANY FEES ASSOCIATED WITH THE REMOVAL AND REPLACEMENT OF THE SIGNS.

SCHEDULE
THE CONTRACTOR SHALL COMPLETE ALL WORK IN AN EXPEDITIOUS MANNER AND SHALL NOT STOP WORK ON THE PROJECT ONCE BEGUN.

CONSTRUCTION STAKING
WHEN CONSTRUCTION STAKING IS TO BE PROVIDED BY THE ENGINEER OR OWNER, THE CONTRACTOR SHALL REQUEST STAKING AT LEAST THREE WORKING DAYS IN ADVANCE.

WHEN CONSTRUCTION STAKING IS TO BE PROVIDED BY THE ENGINEER OR OWNER, STAKING WILL BE PROVIDED ONE TIME. THE CONTRACTOR SHALL PROTECT AND PRESERVE SURVEY CONTROL AND STAKING. RE-STAKING WILL BE AT THE CONTRACTOR'S EXPENSE.

SURVEY CORNERS, BENCHMARKS, AND CONTROL POINTS
THE CONTRACTOR SHALL PRESERVE ALL GOVERNMENT CORNERS, PROPERTY CORNERS, BENCHMARKS, SURVEY CONTROL POINTS AND OTHER SURVEY POINTS WITHIN THE PROJECT AREA. WHERE CORNERS, BENCHMARKS, OR SURVEY POINTS ARE ENCOUNTERED WHICH WILL BE DISTURBED BY THE CONTRACTOR'S ACTIVITIES; A LICENSED SURVEYOR SHALL WITNESS THE POINT BEFORE DISTURBANCE AND SHALL RE-SET THE POINT FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL PAY THE SURVEYOR TO WITNESS AND TO RE-SET THE POINTS.

PROTECTION OF TREES, SHRUBS, AND LANDSCAPING
ALL TREES, SHRUBS, AND LANDSCAPING WITHIN THE CONSTRUCTION AREA WHICH ARE NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED TREES, SHRUBS, AND LANDSCAPING SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

CONSTRUCTION SIGNING AND BARRICADING
THE CONTRACTOR SHALL PROTECT HAZARDOUS AREAS WITH BARRICADES. BARRICADES LEFT IN PLACE AFTER SUNSET SHALL BE LIGHTED. THE CONTRACTOR SHALL PROVIDE SUITABLE SANDBAGS OR OTHER SUITABLE MEASURES FOR ANCHORING OF TEMPORARY SIGNS AND BARRICADES, TO PREVENT THEIR TIPPING OR DISPLACEMENT BY WIND OR AIR FLOW FROM VEHICLES.

THE CONTRACTOR SHALL PROVIDE SIGNING, BARRICADES, FLAGGERS, CONES, AND OTHER TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCY HAVING JURISDICTION OVER STREETS OR ROADS IN THE PROJECT AREA, THE CURRENT MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND THE PLANS AND SPECIFICATIONS.

THE CONTRACTOR SHALL COVER OR REMOVE TEMPORARY SIGNS DURING PERIODS WHEN THEY ARE NOT APPROPRIATE.

TURF ESTABLISHMENT
ALL DISTURBED AREAS WHICH ARE NOT TO BE SURFACED WITH PAVEMENT, AGGREGATE OR OTHER APPROVED SURFACES SHALL BE ESTABLISHED WITH TURF.

TURF AREAS SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE.

DISTURBED AREAS SHALL BE SURFACED WITH THREE INCHES OF SCREENED TOPSOIL.

THE CONTRACTOR IS RESPONSIBLE TO ESTABLISH TURF WHICH IS SUBSTANTIALLY FREE OF BARE SPOTS AND FREE OF WEEDS. THE GROUND SURFACE IN TURF AREAS SHALL BE SMOOTH AND PROVIDE A NATURAL TRANSITION TO ADJACENT, UNDISTURBED AREAS.

THE CONTRACTOR IS RESPONSIBLE TO PROVIDE WATERING, WEEDING, RESEEDING, AND REWORKING AS NECESSARY TO ESTABLISH TURF AREAS TO THE REQUIRED STANDARD.

EARTHWORK
EARTHWORK QUANTITIES, IF PROVIDED, ARE PROVIDED FOR THE CONTRACTOR'S INFORMATION. THE QUANTITIES WERE DEVELOPED USING THE AVERAGE END AREA METHOD. ASSUMPTIONS REGARDING TOPSOIL AND SHRINKAGE ARE STATED WITH THE ESTIMATES OF EXCAVATION AND FILL.

THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF THE EARTHWORK QUANTITIES, AND BASE HIS BID ON HIS DETERMINATION OF THE QUANTITIES OF WORK REQUIRED.

IF ADDITIONAL FILL MATERIAL MUST BE PROVIDED TO ATTAIN THE FINISH GRADES SHOWN ON THE PLANS, THE CONTRACTOR SHALL PROVIDE THE REQUIRED FILL MATERIAL, UNLESS A SPECIFIC BORROW AREA IS IDENTIFIED ON THE PLANS.

EXCESS SOILS RESULTING FROM EXCAVATION AND EARTHWORK SHALL BECOME THE CONTRACTOR'S PROPERTY AND DISPOSED OF PROPERLY, UNLESS AN AREA(S) HAS BEEN DESIGNATED FOR STOCKPILING OR "BLENDING IN" THE EXCESS MATERIAL WITHIN THE PROJECT LIMITS.

BACKFILL AND EMBANKMENT
BACKFILL OF AN EXCAVATION UNDER OR WITHIN THE ONE ON ONE INFLUENCE OF AN EXISTING OR PROPOSED ROAD, SIDEWALK, DRIVEWAY, PAVEMENT, OR AGGREGATE SURFACE, SHALL BE SAND, MEETING THE REQUIREMENTS OF GRANULAR MATERIAL CLASS III AS DESCRIBED IN THE CURRENT MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE SAND BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

BACKFILL OF AN EXCAVATION WHICH IS NOT UNDER OR WITHIN THE ONE ON ONE INFLUENCE OF AN EXISTING OR PROPOSED ROAD, SIDEWALK, DRIVEWAY, PAVEMENT, OR AGGREGATE SURFACE MAY BE SUITABLE EXCAVATED MATERIAL OR OTHER SOIL, WHICH IS FREE OF ORGANIC MATTER, STONES AND ROCKS, ROOTS, BROKEN CONCRETE, FROZEN MATERIAL, OR DEBRIS. THE BACKFILL SHALL BE COMPACTED TO AT LEAST 90% OF ITS MAXIMUM UNIT WEIGHT.

THE CONTRACTOR SHALL INDICATE THE SOURCE OF SAND USED FOR BACKFILL TO THE ENGINEER, AND PROVIDE THE ENGINEER WITH THE RESULTS OF A GRADATION TEST PERFORMED ON A SAMPLE OF THE SAND. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN ADVANCE OF USING SAND FROM OTHER SOURCES.

EMBANKMENT USED TO BUILD THE SUBGRADE TO REQUIRED ELEVATION SHALL BE SUITABLE SOIL EXCAVATED FROM THE PROJECT SITE, OR FURNISHED BY THE CONTRACTOR FROM OTHER SOURCES. SUITABLE SOIL IS FREE FROM ORGANIC MATTER, ROCKS AND STONES, FROZEN MATERIAL, BROKEN CONCRETE, AND DEBRIS.

EMBANKMENT CONSTRUCTED OF GRANULAR SOILS SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 10 INCHES TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

EMBANKMENT CONSTRUCTED OF COHESIVE SOILS SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 6 INCHES TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

DENSITY TESTING
THE MAXIMUM DRY DENSITY OF SAND AND OTHER GRANULAR SOILS WILL BE DEFINED BY THE MODIFIED PROCTOR ASTM D1557, AS DESCRIBED IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION'S DENSITY TESTING AND INSPECTION MANUAL.

THE MAXIMUM DRY DENSITY OF COHESIVE SOILS WILL BE DEFINED BY THE MODIFIED PROCTOR ASTM D1557, AS DESCRIBED IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION'S DENSITY TESTING AND INSPECTION MANUAL.

WORK HOURS
UNLESS PROVIDED OTHERWISE IN THE CONTRACT DOCUMENTS OR LIMITED BY LOCAL ORDINANCE, THE CONTRACTOR SHALL WORK WITHIN OF THE FOLLOWING TIMES, UNLESS OTHERWISE APPROVED BY THE OWNER:
MONDAY THROUGH FRIDAY 7 A.M. TO 8 P.M.
SATURDAY 8 A.M. TO 6 P.M.

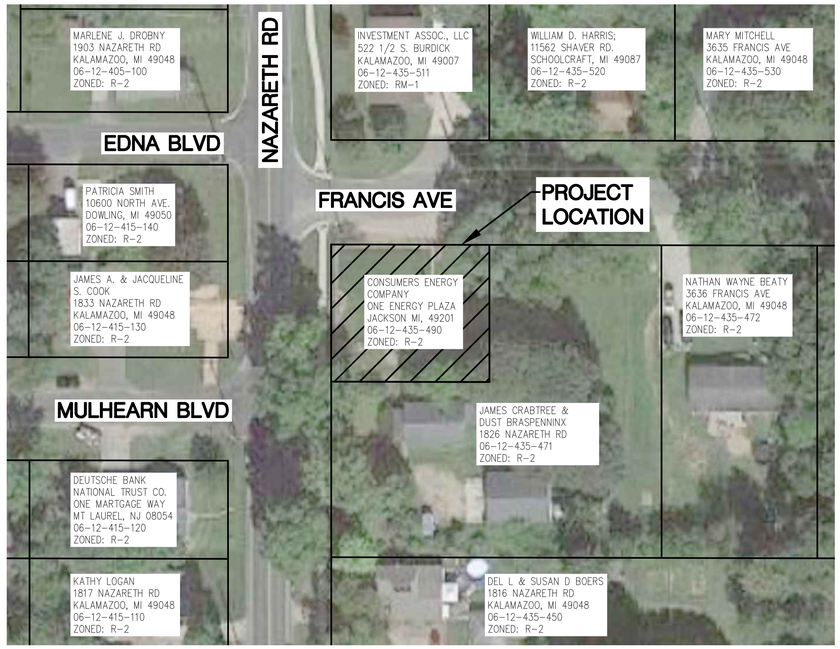
THE CONTRACTOR SHALL NOT WORK ON SUNDAYS OR HOLIDAYS, UNLESS OTHERWISE APPROVED BY THE OWNER.

DRAINAGE
THE CONTRACTOR SHALL MAINTAIN DRAINAGE OF THE PROJECT AREA AND ADJACENT AREAS. WHERE EXISTING DRAINAGE FACILITIES ARE DISTURBED OR BLOCKED BY CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY PROVISIONS FOR DRAINAGE.

WHERE CONSTRUCTION HAS DISTURBED EXISTING DITCHES, SWALES, OR OTHER DRAINAGE FACILITIES; THE CONTRACTOR SHALL RESTORE THEM TO THEIR GRADES AND DIMENSIONS WHICH EXISTED PRIOR TO THE BEGINNING OF CONSTRUCTION, UNLESS DIRECTED OTHERWISE.

DRAINAGE SHALL NOT BE REROUTED ONTO ADJACENT PROPERTIES NOR ALLOWED TO DRAIN ONTO ADJACENT PROPERTIES AT AN INCREASED RATE, AS A RESULT OF THE CONTRACTOR'S WORK.

N
NOT TO SCALE



KALAMAZOO / NAZARETH CITY GATE - SITE VICINITY MAP

NOTE: PROPERTY LINES AND ZONING CLASSIFICATIONS SHOWN ON THE SITE VICINITY MAP ARE TAKEN FROM KALAMAZOO COUNTY GIS MAPPING. ROWE HAS NOT FIELD VERIFIED THIS INFORMATION.

ZONING
R-2 – SINGLE AND TWO FAMILY RESIDENTIAL
RM-1 – MULTIPLE FAMILY RESIDENTIAL

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CAUTION
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CONTACT PROJECT ENGINEER BEFORE PROCEEDING

ORIGINAL DRAWING #

REFERENCE DRAWINGS NUMBERS	REV.	PROJECT #	DATE	DESCRIPTION	DR	CK	DES. APP.	ENG. APP.	CO
			03/28/22	REVISED PER TWP	JAM	DAS	DAS		
			03/04/22	SITE PLAN SUBMITTAL	JAM	DAS	DAS		

REV.	PROJECT #	DATE	DESCRIPTION	DR	CK	DES. APP.	ENG. APP.	CO

DRAWN J. MILLER DATE MAR 2022
CHECKED K. LAMBERT DATE MAR 2022
DESIGNED J. MILLER DATE MAR 2022
DESIGN APPROVAL D. SCOTT DATE MAR 2022
ENGINEER APPROVAL S. TESSMAR DATE MAR 2022

ROWE PROFESSIONAL SERVICES COMPANY

Consumers Energy Count on Us®
GEO-SPATIAL & GAS ASSET MANAGEMENT
JACKSON, MI

FILE: 401300C1324-PMT.002.dgn
RASTER FILE:
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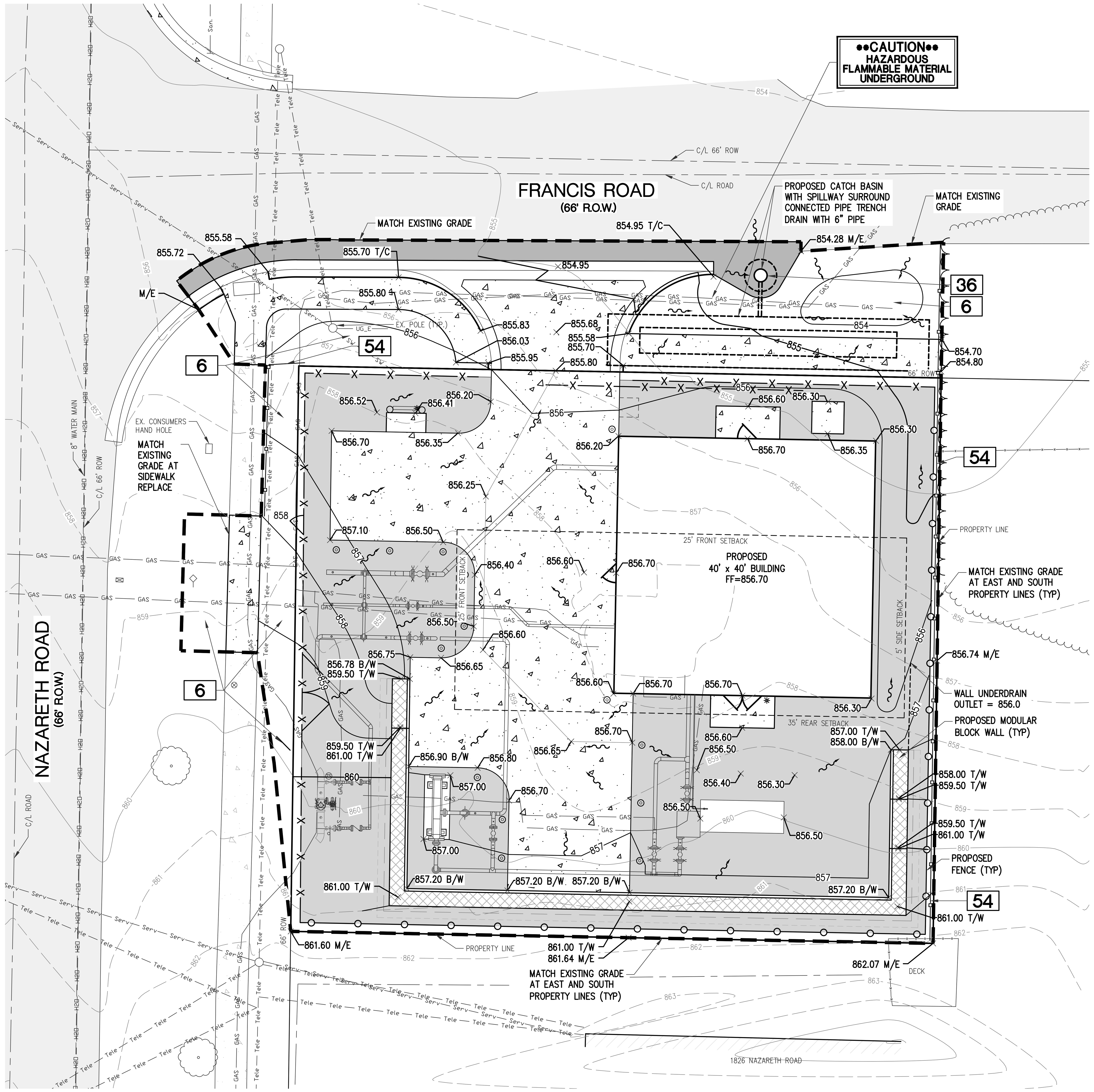
DO NOT SCALE DRAWING USE DIMENSIONS ONLY

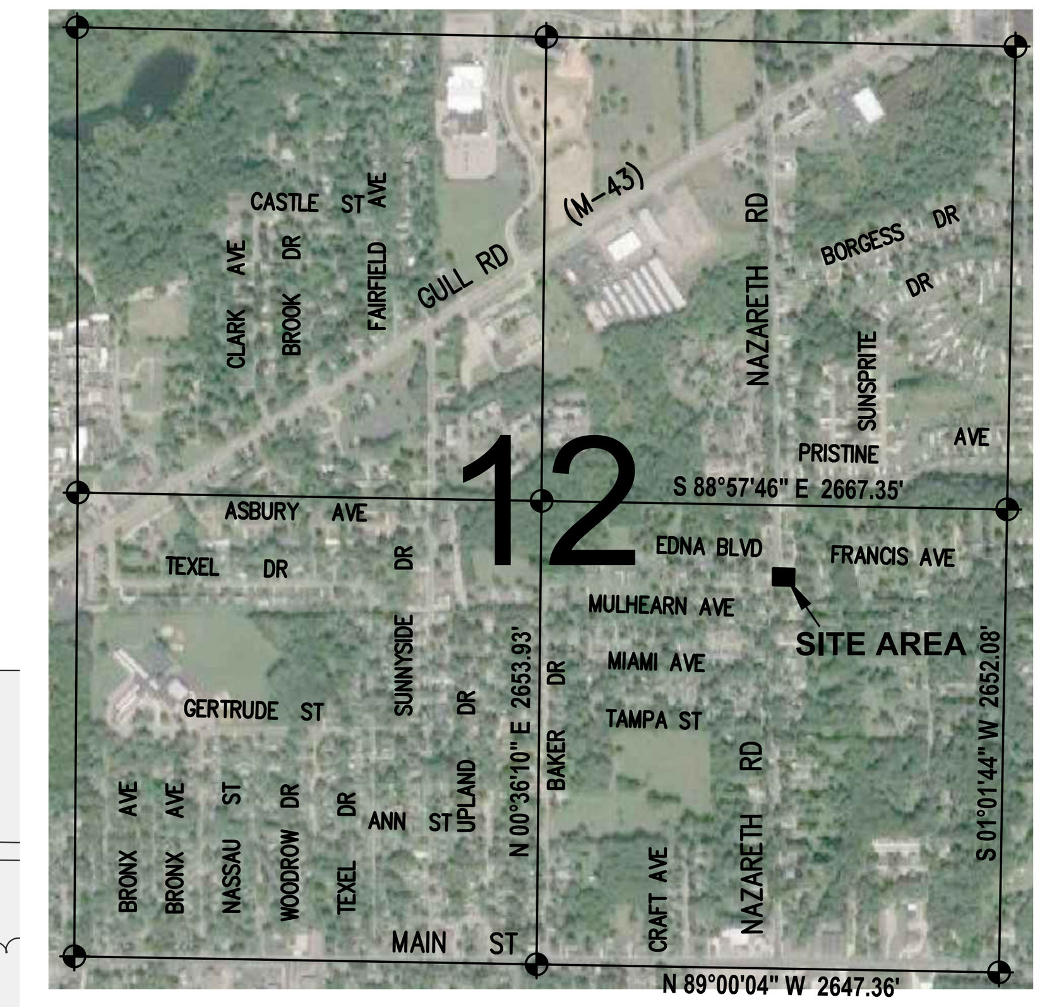
KALAMAZOO / NAZARETH CITY GATE
2022 RECONSTRUCTION

GENERAL NOTES

FIELD AREA:
PROJECT # 21C0265
STA. NO. K-2
DRAWING NO. C-1324-PMT
SHEET 2
REV

PLOT @

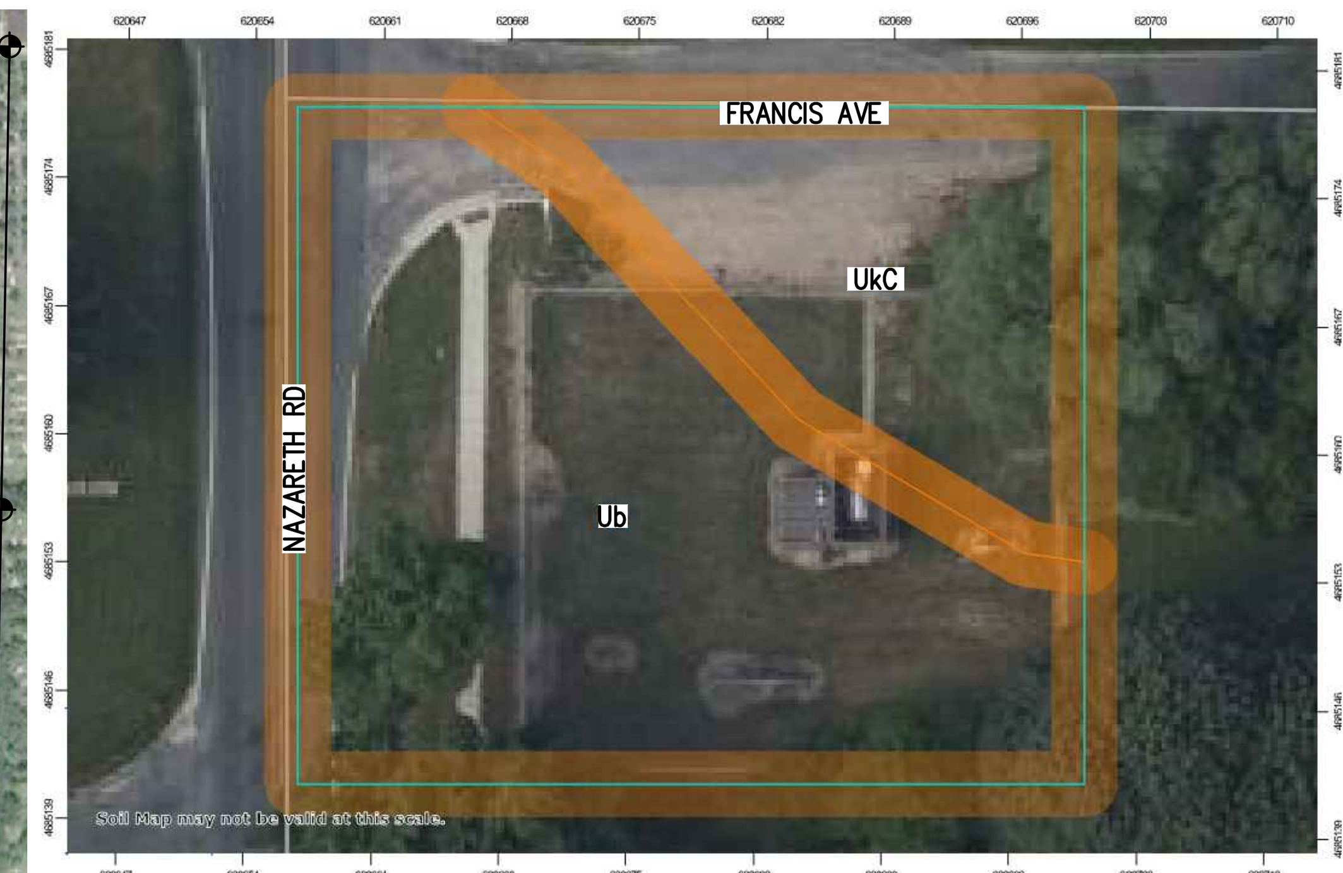




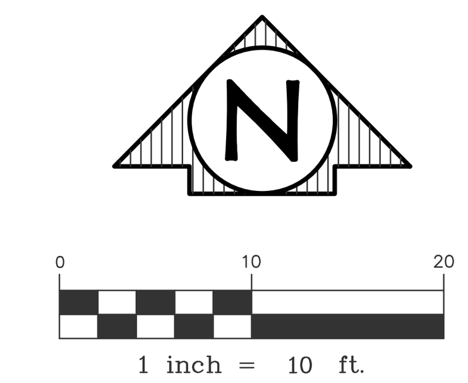
LOCATION MAP
NOT TO SCALE

SECTION 12
KALAMAZOO CHARTER
TOWNSHIP

T2S, R11W
KALAMAZOO COUNTY



Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ub	Urban land	0.3	70.1%
UkC	Urban land-Kalamazoo complex, 6 to 12 percent slopes	0.1	29.9%
Totals for Area of Interest		0.4	100.0%



LEGEND

- CARSONITE POST @ CORNER
- UTILITY POLE
- LIGHT POLE
- GUY ANCHOR
- TELEPHONE RISER
- ELECTRIC RISER
- SIGN
- MAIL BOX
- POST (WOOD/METAL)
- ABOVE GRADE VERTICAL PIPE
- CURB INLET
- EXISTING GATE VALVE AND BOX
- GASLINE MARKER
- GAS VALVE
- BLOWDOWN
- ELECTRICAL CONDUIT
- SECTION CORNER
- FOUND/SET SURVEY
- EXISTING ASPHALT PAVEMENT
- EXISTING CONCRETE
- PROPOSED GRAVEL YARD
- PROPOSED CONCRETE
- —x—x— EXISTING CHAIN LINK FENCE
- — UG_E — UG_E — UNDERGROUND ELECTRIC
- — Dist — Dist — DISTRIBUTION OVERHEAD
- — Serv — Serv — ELECTRIC SERVICE
- — FO — FIBER OPTIC
- — Tele — Tele — TELEPHONE
- — GAS — UNDERGROUND GAS
- SILT FENCE
- LIMITS OF DISTURBANCE
- 856.40 PROPOSED SPOT ELEVATION
- SURFACE DRAINAGE FLOW
- M/E MATCH EXISTING
- T/C TOP OF CONCRETE CURB
- T/W TOP OF WALL
- B/W BOTTOM OF WALL

SITE NOTES:

OWNER INFORMATION
CONSUMERS ENERGY
1945 W PARNALL ROAD
JACKSON, MI 49201

SITE ADDRESS
1838 NAZARETH ROAD
KALAMAZOO, MI 49048
KALAMAZOO TOWNSHIP, KALAMAZOO COUNTY

PROJECT NAME
KALAMAZOO/NAZARETH CITY GATE RECONSTRUCTION

PROXIMITY TO WATERS OF STATE
SPRING VALLEY LAKE IS LOCATED 4,300 FEET NORTHWEST OF THIS SITE, AND SCHIPPERS LANE DRAIN IS LOCATED 4,300 FEET SOUTH OF THIS SITE.

100 YEAR FLOODPLAIN
PER FEMA COMMUNITY MAP PANEL NUMBER 26077C0191D, DATED FEBRUARY 17, 2010, THE SITE DOES NOT LIE IN A FLOOD ZONE.

AREA OF DISTURBANCE
0.26 ACRES

START CONSTRUCTION – MAY 2, 2022
COMPLETE CONSTRUCTION – OCTOBER 31, 2022

PROJECT COMPLETION SCHEDULE
CONSTRUCTION OPERATIONS

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
STRIP & STOCKPILE TOPSOIL / GRAVEL					///	///				
DEMOLITION					///					
YARD PIPING REPLACEMENT						///	///	///		
BUILDING ERECTION						///	///	///		
ROUGH GRADING						///	///	///		
FINISH GRADING / RESTORATION							///	///		
FENCE / GATE REPLACEMENT							///	///		
PUNCH LIST COMPLETION								///	///	

SOIL EROSION/SEDIMENTATION CONTROL
OPERATION TIME SCHEDULE

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
STRIP & STOCKPILE TOPSOIL					///	///				
ROUGH GRADE SEDIMENT CONTROL					///	///				
TEMP. CONTROL MEASURES					///	///	///	///		
TEMP. CONSTRUCTION ROADS					///	///	///	///		
SITE CONSTRUCTION					///	///	///	///		
PERM. CONTROL MEASURES						///	///	///		
FINISH GRADING						///	///	///		
REMOVE TEMP. CONTROL MEASURES									///	

TEMPORARY SEEDING GUIDE

ZONE 1

TYPE OF SEED	APR	MAY	JUN	JUL	AUG	SEP	OCT
SPRING OATS/BARLEY OR DOMESTIC RYEGRASS	///	///	///	///	15TH		
SUDANGRASS			///	///			
RYE OR PERENNIAL RYE					///	///	/// 15TH
WHEAT						///	/// 15TH

PERMANENT SEEDING GUIDE

	APR	MAY	JUN	JUL	AUG	SEP	OCT	
IRRIGATED AND/OR MULCH		///	///	///	///	///		ZONE 1
WITHOUT IRRIGATION OR MULCH		///			///	///		
~~IRRIGATED AND/OR MULCHED~~		///	///	///	///			ZONE 2
~~WITHOUT IRRIGATION OR MULCH~~		///			///			
~~IRRIGATED AND/OR MULCHED~~		///	///	///	///			ZONE 3
~~WITHOUT IRRIGATION OR MULCH~~		///			///			

MICHIGAN UNIFIED KEYING SYSTEM

6	SEEDING WITH MULCH AND/OR MATTING	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER EFFECTIVE FOR DRAINAGEWAYS WITH LOW VELOCITY EASILY PLACED IN SMALL QUANTITIES BY INEXPERIENCED PERSONNEL SHOULD INCLUDE PREPARED TOPSOIL BED
36	CATCH BASIN, DRAIN INLET	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF MAY USE FILTER CLOTH OVER INLET
54	SILT FENCE	USES GEOTEXTILE FABRIC AND POSTS OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY.

PROJECT LOCATION

SEEDING ZONES

Know what's below. Call before you dig.
www.call811.com
or MISSDIG @ 1-800-482-7171

CAUTION
IF INSTALLATION CANNOT BE COMPLETED AS DESIGNED
CONTACT PROJECT ENGINEER BEFORE PROCEEDING

ORIGINAL DRAWING #

REFERENCE DRAWINGS NUMBERS	REV.	PROJECT #	DATE	DESCRIPTION	DR	CK	DES. APP.	ENG. APP.	CO

REV.	PROJECT #	DATE	DESCRIPTION	DR	CK	DES. APP.	ENG. APP.	CO
		03/28/22	REVISED PER TWP	JAM	DAS	DAS		
		03/04/22	SITE PLAN SUBMITTAL	JAM	DAS	DAS		

DRAWN J. MILLER DATE MAR 2022
CHECKED K. LAMBERT DATE MAR 2022
DESIGNED J. MILLER DATE MAR 2022
DESIGN APPROVAL D. SCOTT DATE MAR 2022
ENGINEER APPROVAL S. TESSMAR DATE MAR 2022

ROWE PROFESSIONAL SERVICES COMPANY

Consumers Energy
Count on Us®
GEO-SPATIAL & GAS ASSET MANAGEMENT
JACKSON, MI

FILE: 401300C1324-PMT.002.dgn
RASTER FILE:
SCALE 1" = 10'
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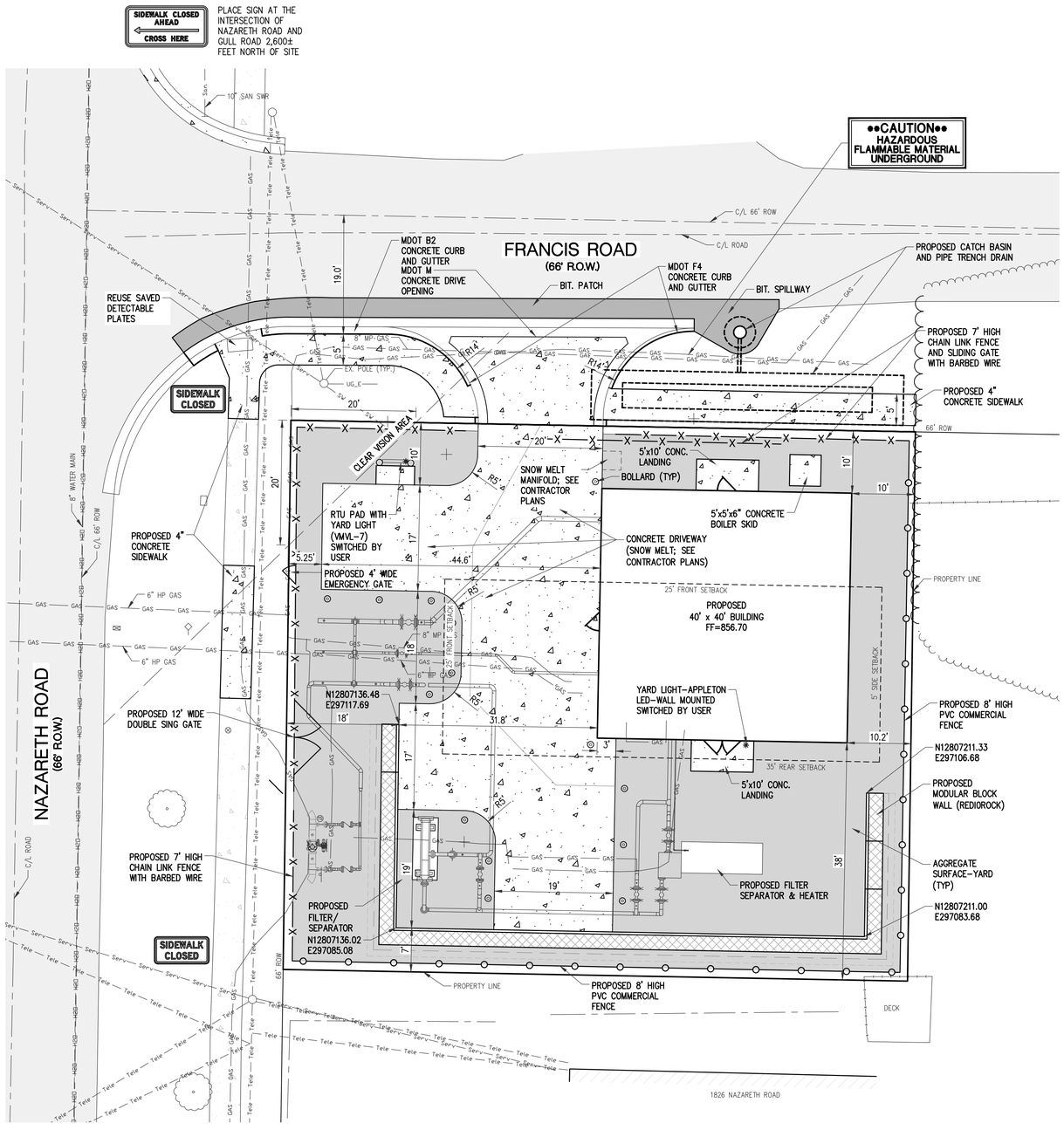
KALAMAZOO / NAZARETH CITY GATE
2022 RECONSTRUCTION

GRADING AND SESC SHEET

CONCEPT A

FIELD AREA:
PROJECT # 21C0265
STA. NO. K-2
DRAWING NO. C-1324-SPL
SHEET 3
REV
PLOT @



R-2, SINGLE & TWO-FAMILY DISTRICT SCHEDULE OF REGULATIONS								
	MINIMUM LOT DIMENSIONS		MAXIMUM STRUCTURE HEIGHT		MINIMUM REQUIRED SETBACK (IN FEET)			MAXIMUM COVERAGE OF LOT BY BUILDINGS
	AREA (sq. ft.)	WIDTH (feet)	STORIES	FEET	FRONT YARD	EACH SIDE YARD	REAR YARD	
REQUIRED	13200	80	2.5	30	25	5	35	25%
PROVIDED	8798	100	1.0	14	10	10	38	18%

SITE PLAN NOTES:

1. THE SITE WILL NOT BE REGULARLY OCCUPIED. EMPLOYEES WILL ROUTINELY VISIT THE AREA TO PERFORM REGULAR INSPECTIONS AND ROUTINE MAINTENANCE. THE PROPOSED PLAN PROVIDES SUFFICIENT SPACE FOR THE ANTICIPATED PARKING NEEDS.
2. THE ENTRANCE DRIVE LAYOUT HAS BEEN REVIEWED BY THE ROAD COMMISSION OF KALAMAZOO COUNTY. THE PROPOSED LAYOUT REFLECTS THEIR REQUIREMENTS.
3. THERE WILL NOT BE OUTDOOR STORAGE OF ITEMS VISIBLE FROM OFFSITE THAT WOULD REQUIRE SCREENING.
4. THE PROPOSED PROJECT WILL NOT IMPACT ANY WETLANDS.
5. THE PROPOSED PROJECT WILL NOT IMPACT ANY FLOODPLAINS.
6. THE PROJECT WILL INCLUDE INSTALLATION OF A NEW 40'X40' BUILDING AND GAS PIPING.
7. THE PROJECT AREA WILL BE ACCESSED VIA THE EXISTING DRIVE ALONG FRANCIS ROAD. NO WORK SHALL TAKE PLACE WITHIN THE ROAD RIGHT OF WAY WITHOUT AN APPROVED PERMIT FROM THE ROAD COMMISSION OF KALAMAZOO COUNTY.
8. YARD LIGHTS WILL BE HAZARDOUS AREA LIGHTS OPERATED BY SWITCH BY PERSONNEL WHEN WORKING ON SITE.
9. PERMANENT LITTER RECEPTACLES/DUMPSTERS ARE NOT PROVIDED FOR THIS SITE. ANY WASTE GENERATED ONSITE WILL BE REMOVED THE SAME DAY. TEMPORARY DUMPSTERS MAY BE ONSITE DURING CONSTRUCTION BUT WILL BE REMOVED PRIOR TO COMPLETION OF CONSTRUCTION.
10. THE AREA WITHIN THE FENCE WILL BE SURFACED WITH CRUSHED LIMESTONE.
11. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING. SEE SHEET 3 FOR GRADING INFORMATION.
12. BUILDING LOCATION SHALL BE COORDINATED AS NECESSARY WITH LOCATION OF MECHANICAL EQUIPMENT AND PIPING.
13. THE PROPOSED CONCRETE PAVEMENT CROSS SECTION WILL INCLUDE AN ICE MELT SYSTEM. THE ACTUAL PAVEMENT CROSS SECTION WILL BE DETERMINED BY THE ICE MELT SYSTEM SUPPLIER.

MAINTAIN TRAFFIC NOTES:

1. MAINTAINING TRAFFIC AND LANE CLOSURE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS.
2. SIDEWALK ON THE EAST SIDE OF NAZARETH ROAD WILL BE CLOSED UNTIL PROPOSED WORK IS FULLY COMPLETED. PROPER SIDEWALK/CROSSWALK CLOSURE SIGNAGE AND PEDESTRIAN BARRICADES SHALL BE PLACED ACCORDINGLY.

MDOT TRAFFIC AND SAFETY STANDARD PLANS

PLAN NO.	TITLE
101-GEN-SPACING-CHARTS	"B", "D" AND "L" TABLES CHANNELIZING DEVICE SPACING, SIGN BORDER KEY, AND ROLL-AHEAD SPACING
102-GEN-NOTES	TRAFFIC TYPICALS NOTE SHEET
4110A-M-TR-NFW-2L	LANE CLOSURE FOR A TWO-LANE, TWO-WAY ROADWAY UTILIZING TRAFFIC REGULATORS NO SPEED REDUCTION
4122-M-NFW-SHL	SHOULDER CLOSURE ON A TWO-LANE, TWO-WAY ROADWAY

N

0 10 20

1 inch = 10 ft.

LEGEND

- CARSONITE POST @ CORNER
- UTILITY POLE
- LIGHT POLE
- GUY ANCHOR
- TELEPHONE RISER
- ELECTRIC RISER
- SIGN
- MAIL BOX
- POST (WOOD/METAL)
- ABOVE GRADE VERTICAL PIPE
- CURB INLET
- EXISTING GATE VALVE AND BOX
- GASLINE MARKER
- GAS VALVE
- BLOWDOWN
- ELECTRICAL CONDUIT
- SECTION CORNER
- FOUND/SET SURVEY
- EXISTING ASPHALT PAVEMENT
- EXISTING CONCRETE
- PROPOSED GRAVEL YARD
- PROPOSED CONCRETE
- EXISTING CHAIN LINK FENCE
- UNDERGROUND ELECTRIC
- DISTRIBUTION OVERHEAD
- ELECTRIC SERVICE
- FIBER OPTIC
- TELEPHONE
- UNDERGROUND GAS

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JACKSON, MI

FILE: 401300C1324-PMT.002.dgn
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SCALE 1" = 10'

KALAMAZOO / NAZARETH CITY GATE
2022 RECONSTRUCTION

SITE PLAN SHEET

FIELD AREA:
PROJECT # 21C0265
STA. NO. K-2
DRAWING NO. C-1324-PMT
SHEET 4
REV

DO NOT SCALE DRAWING USE DIMENSIONS ONLY

PLOT 8

PL-Q EXHIBIT "QA"

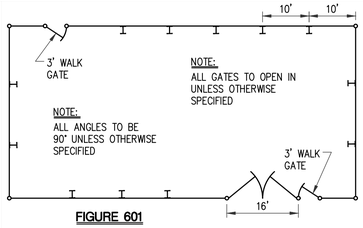


FIGURE 601

TYPICAL FENCE LAYOUT PLAN

A DRAWING SIMILAR TO FIGURE 601 SHALL ACCOMPANY ALL FENCE ORDERS. THE DRAWING SHALL INDICATE ALL FENCE ANGLES ALSO GATES AND REMOVABLE SECTIONS SIZES AND LOCATIONS. REFER TO EXHIBITS "QA" THROUGH "QE" FOR MATERIAL, FABRICATION AND ERECTION DETAILS.

NAME OF PART	NOMINAL PIPE SIZE	POST DEPTH IN FOOTING	MINIMUM FOOTING DIMENSIONS		
			TOP DIA	BOTTOM DIA	FOOTING DEPTH
LINE POST	SEE NOTE 2	1'-5"	1'-5"	1'-5"	4'-0"
CORNER POST	4	1'-5"	1'-5"	1'-5"	4'-0"
END AND ANGLE POST	4	1'-5"	1'-5"	1'-5"	4'-0"
SINGLE GATE POST, WIDTH 6' AND UNDER	3	1'-5"	1'-5"	1'-5"	4'-0"
SINGLE GATE POST, WIDTH OVER 6' TO 13'	4	1'-5"	1'-5"	1'-5"	4'-0"
DOUBLE GATE POST, WIDTH 12' AND UNDER	3	1'-5"	1'-5"	1'-5"	4'-0"
DOUBLE GATE POST, WIDTH OVER 12' TO 26'	4	1'-5"	1'-5"	1'-5"	4'-0"
SLIDE GATE POST WIDTH 24' AND UNDER	4	1'-5"	1'-5"	1'-5"	4'-0"
GATE AND REMOVABLE SECTION FRAME	2				
TOP RAIL	1 ¼				
BRACE	1 ¼				
REMOVABLE POST	2 ½		1'-5"	1'-5"	3'-0"
GATE PLUNGER STOP (OR CATCH)			0'-10"	1'-2"	3'-0"
GATE KEEPER			0'-7"	0'-10"	3'-0"

FIGURE 602

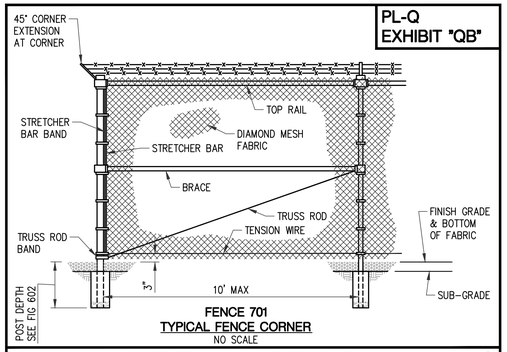
NOTES:
1. ALL DIMENSIONS ARE IN INCHES EXCEPT AS NOTED.
2. EITHER 2¾" X 3.26 LB/FT H BEAM OR 2½" PIPE MAY BE USED.

REFERENCES: A-15083

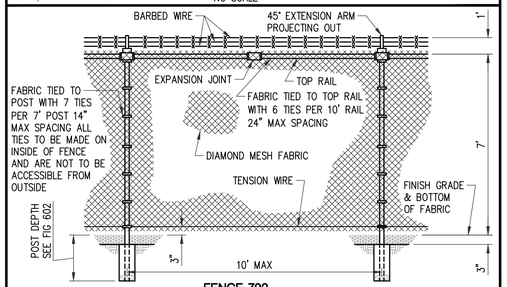
PRFMB3061091
GASTSEC,5071090.001

FENCING DETAILS

PL-Q EXHIBIT "QB"



FENCE 701
TYPICAL FENCE CORNER
NO SCALE



FENCE 702
TYPICAL FENCE LINE SPAN
NO SCALE

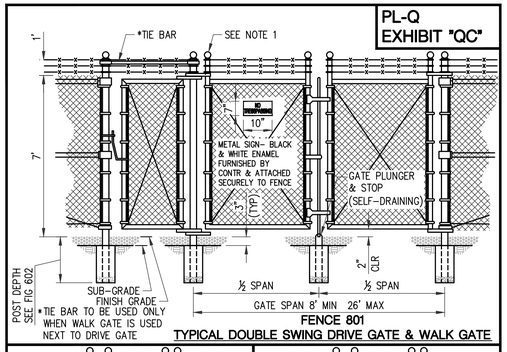
NOTES:
1. SEE FOG 602 FOR FOOTING DEPTH & DIAMETER

REFERENCES: A-15084

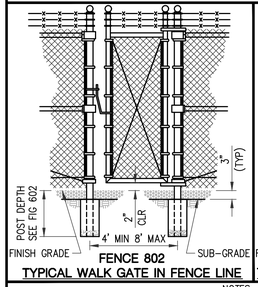
PRFMB3061091
GASTSEC,5071090.001

FENCING DETAILS

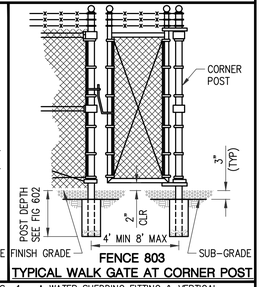
PL-Q EXHIBIT "QC"



FENCE 801
TYPICAL DOUBLE SWING DRIVE GATE & WALK GATE



FENCE 802
TYPICAL WALK GATE IN FENCE LINE



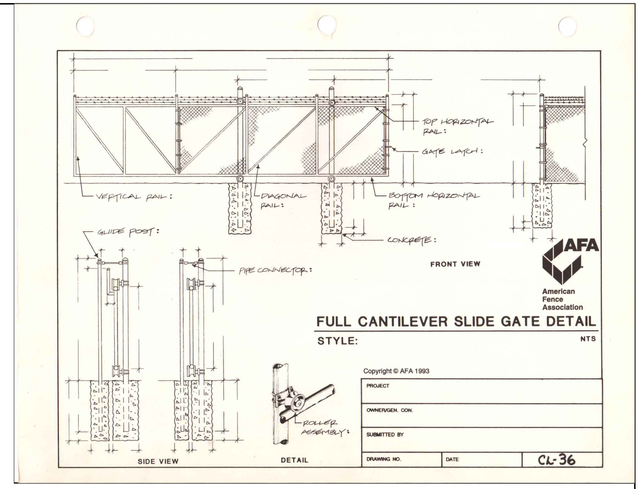
FENCE 803
TYPICAL WALK GATE AT CORNER POST

NOTES:
1. A WATER SHEDDING FITTING & VERTICAL EXTENSION SHALL BE PROVIDED ON TOP OF EACH GATE POST & GATE FRAME.
2. SEE FIG 602 FOR FOOTING DEPTH & DIAMETER.

REFERENCES: A-15065

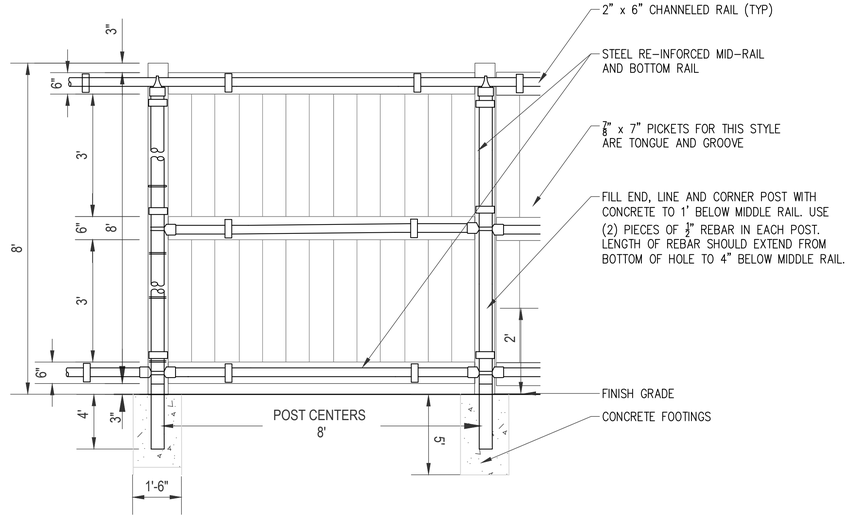
PRFMB3061091
GASTSEC,5071090.001

FENCING DETAILS



SLIDING GATE DETAIL

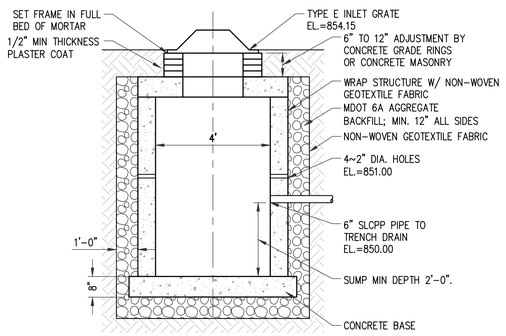
NOT TO SCALE



NOTE: INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS FOR COMMERCIAL GRADE FENCE BUFFTECH GALVESTON (INCREASED DURABILITY AND LONG-TERM PERFORMANCE WITH STEEL REINFORCED RAILINGS, HEAVYWEIGHT PICKETS. ROUTED RAILS AND FENCE POSTS, AND CONCEALED FASTENERS) WITH CERTA-GRAIN TEXTURE (8' HEIGHT) – COLOR: SIERRA BLEND

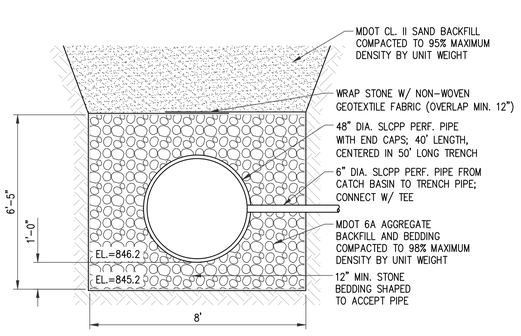
8' HIGH PVC COMMERCIAL FENCE

NOT TO SCALE



CATCH BASIN WITH 2' SUMP

NOT TO SCALE



PIPE TRENCH DRAIN DETAIL

NOT TO SCALE

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			03/04/22	SITE PLAN SUBMITTAL	JAM	DAS	DAS		

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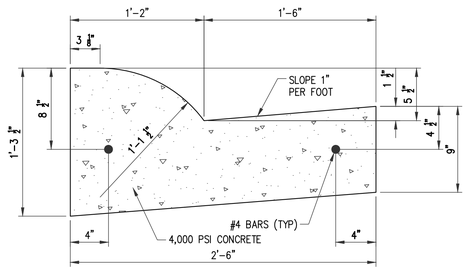
FILE: 401300C1324-PMT.002.dgn
RASTER FILE:
SCALE NO SCALE
DO NOT SCALE DRAWING USE DIMENSIONS ONLY

KALAMAZOO / NAZARETH CITY GATE
2022 RECONSTRUCTION

DETAIL SHEET

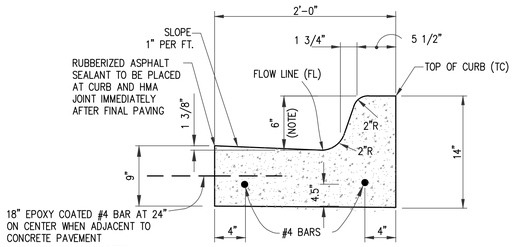
FIELD AREA:
PROJECT # 21C0265
STA. NO. K-2
DRAWING NO. C-1324-SAD
SHEET 5
REV

PLOT B



B2 CURB & GUTTER DETAIL

NOT TO SCALE

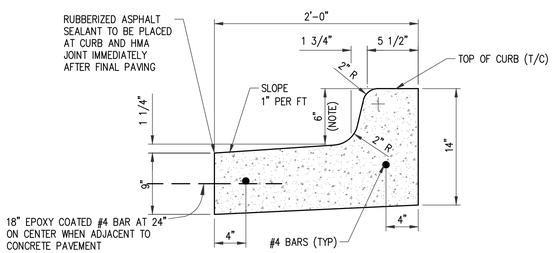


NOTES:

1. REDUCE HEIGHT TO ½" FOR LOW BACK CURB (RO)
2. CURB AND GUTTER TO BE PLACED ON A MIN 3" MDOT 21AA AGGREGATE BASE COMPACTED TO 95% MAXIMUM DENSITY AND MIN 12" MDOT CLASS II GRANULAR SAND SUBBASE COMPACTED TO 95% MAXIMUM DENSITY
3. CONCRETE TO HAVE 5.5–8% AIR ENTRAINMENT AND A MIN OF 4,000 PSI 28–DAY COMPRESSIVE STRENGTH

MDOT F4 CURB AND GUTTER DETAIL (FLOW CURB)

NOT TO SCALE

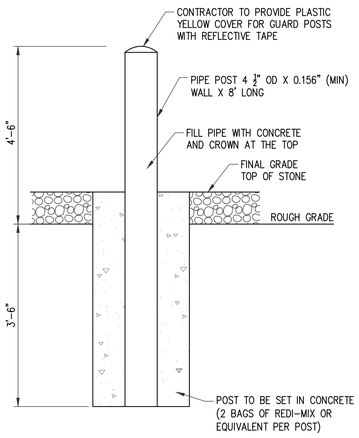


NOTES:

1. REDUCE HEIGHT TO ½" FOR LOW BACK CURB (RO)
2. CURB AND GUTTER TO BE PLACED ON A MIN 3" MDOT 21AA AGGREGATE BASE COMPACTED TO 95% MAXIMUM DENSITY AND MIN 12" MDOT CLASS II GRANULAR SAND SUBBASE COMPACTED TO 95% MAXIMUM DENSITY
3. CONCRETE TO HAVE 5.5–8% AIR ENTRAINMENT AND A MIN OF 4,000 PSI 28–DAY COMPRESSIVE STRENGTH

MDOT F4 CURB AND GUTTER DETAIL, MODIFIED (SPILL CURB)

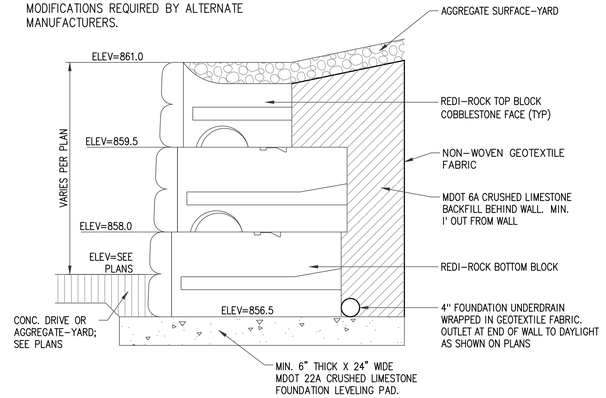
NOT TO SCALE



BOLLARD

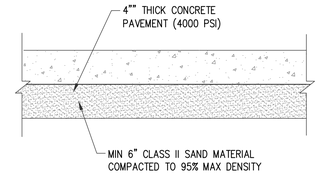
NOT TO SCALE

NOTE: RETAINING WALL DESIGN BASED UPON REDI–ROCK. ALTERNATE MANUFACTURERS WILL BE CONSIDERED IF PRESENTED. THE CONTRACTOR IS RESPONSIBLE FOR ALL MODIFICATIONS REQUIRED BY ALTERNATE MANUFACTURERS.



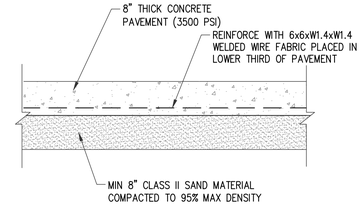
RETAINING WALL DETAIL

NOT TO SCALE



CONCRETE SIDEWALK

NOT TO SCALE

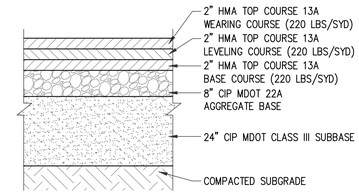


CONCRETE SCORING NOTES:

1. THE CONTRACTOR SHALL PROVIDE A SCORING PLAN FOR APPROVAL 48 HOURS PRIOR TO POURING CONCRETE.
2. MAXIMUM JOINT SPACING SHALL BE 10 FEET UNLESS OTHERWISE STATED BY ENGINEER.
3. THE SAW CUTS SHALL BE CUT TO A MAXIMUM OF ½" DEEP. CONTRACTOR SHALL COORDINATE SAW CUT LOCATIONS AND DEPTHS WITH SNOW MELT SYSTEM.
4. CONCRETE DRIVEWAY WILL INCLUDE SNOW MELT SYSTEM; REFER TO CONTRACTOR PLANS.

CONCRETE DRIVEWAY

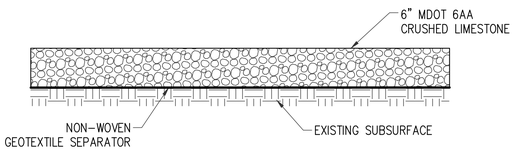
NOT TO SCALE



NOTE:
SHALL BE PLACED IN ACCORDANCE WITH ROAD COMMISSION OF KALAMAZOO COUNTY CONSTRUCTION GUIDELINES.

BITUMINOUS PATCH - SECTION

NOT TO SCALE



NOTES:
1. NON–WOVEN GEOTEXTILE SEPARATOR SHALL BE MIRAFI 180N, SYNTHETIC INDUSTRIES 801 OR AN ENGINEER APPROVED EQUIVALENT PRODUCT.
2. THIS CROSS SECTION WILL BE USED FOR THE ENTIRE YARD SURFACE, EXCEPT FOR AREAS DESCRIBED AS DRIVEWAYS, AS SHOWN ON THE SITE DRAWINGS.

AGGREGATE SURFACE - YARD

NOT TO SCALE

Know what's below. Call before you dig. www.call811.com or MISSDIG @ 1-800-482-7171

CAUTION
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ORIGINAL DRAWING #

REFERENCE DRAWINGS NUMBERS	REV.	PROJECT #	DATE	DESCRIPTION	DR	CK	DES. APP.	ENG. APP.	CO

REV.	PROJECT #	DATE	DESCRIPTION	DR	CK	DES. APP.	ENG. APP.	CO
		03/28/22	REVISED PER TWP	JAM	DAS	DAS		
		03/04/22	SITE PLAN SUBMITTAL	JAM	DAS	DAS		

DRAWN J. MILLER DATE MAR 2022
CHECKED K. LAMBERT DATE MAR 2022
DESIGNED J. MILLER DATE MAR 2022
DESIGN APPROVAL D. SCOTT DATE MAR 2022
ENGINEER APPROVAL S. TESSMAR DATE MAR 2022

ROWE PROFESSIONAL SERVICES COMPANY

Consumers Energy Count on Us®
GEO-SPATIAL & GAS ASSET MANAGEMENT
JACKSON, MI

FILE: 401300C1324-PMT.002.dgn
RASTER FILE:

SCALE NO SCALE
DO NOT SCALE DRAWING USE DIMENSIONS ONLY

KALAMAZOO / NAZARETH CITY GATE 2022 RECONSTRUCTION

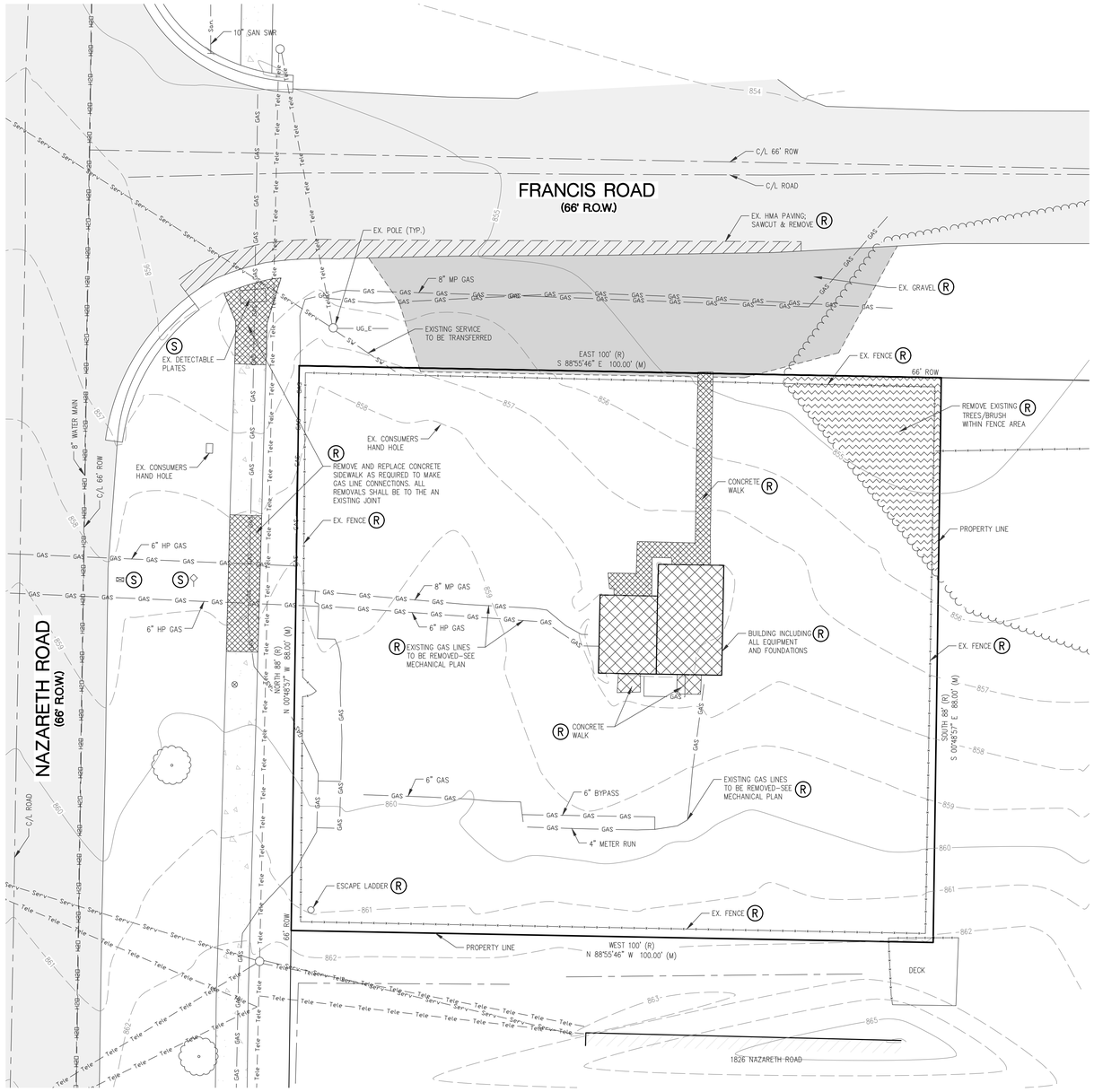
DETAIL SHEET

FIELD AREA:

PROJECT # 21C0265
STA. NO. K-2

DRAWING NO. C-1324-SAD
SHEET 6
REV

PLOT @



LOCATION MAP

NOT TO SCALE

SECTION 12
KALAMAZOO CHARTER TOWNSHIP

T2S, R11W
KALAMAZOO COUNTY

BASIS OF BEARING

MICHIGAN STATE PLANE COORDINATE SYSTEM
SOUTH ZONE – NAD83 2011 – INTERNATIONAL FEET
REFERENCED TO THE MICHIGAN SPATIAL REFERENCE NETWORK
VRS NETWORK SOLUTION
AVG. COMBINED SCALE FACTOR = 0.99991605
GROUND DISTANCES ARE SHOWN

BASIS OF ELEVATION

NORTH AMERICAN VERTICAL DATUM OF 1988 (GEOID12A)
MICHIGAN SPATIAL REFERENCE NETWORK
VRS NETWORK SOLUTION

1 FOOT CONTOURS ARE SHOWN

CONTROL POINT # 1

SET 1/2" DIAMETER X 18" LONG STEEL BAR WITH RED CAP "HEI CONTROL"
NORTHING 297166.07'
EASTING 12807099.16'
ELEV = 856.70'

CONTROL POINT #2

SET 1/2" DIAMETER X 18" LONG STEEL BAR WITH RED CAP "HEI CONTROL"
NORTHING 297669.67'
EASTING 12807110.74'
ELEV = 856.70'

SITE PLAN NOTES

1. THE EXISTING SURVEY WAS PRODUCED BY HOLLAND ENGINEERING AND PROVIDED TO ROWE PSC BY CONSUMERS ENERGY.
2. ROWE PSC HAS NOT FIELD VERIFIED THE SURVEY INFORMATION.

N

0 10 20
1 inch = 10 ft.

LEGEND

- CARSONITE POST @ CORNER
- UTILITY POLE
- LIGHT POLE
- GUY ANCHOR
- TELEPHONE RISER
- ELECTRIC RISER
- SIGN
- MAIL BOX
- POST (WOOD/METAL)
- ABOVE GRADE VERTICAL PIPE
- CURB INLET
- EXISTING GATE VALVE AND BOX
- GASLINE MARKER
- GAS VALVE
- BLOWDOWN
- ELECTRICAL CONDUIT
- SECTION CORNER
- FOUND/SET SURVEY
- EXISTING ASPHALT PAVEMENT
- EXISTING GRAVEL
- EXISTING CONCRETE
- REMOVE EXISTING CONCRETE
- SAWCUT & REMOVE EXISTING ASPHALT PAVEMENT
- REMOVE EXISTING BUILDING
- REMOVE EXISTING TREES/BRUSH
- EXISTING CHAIN LINK FENCE
- UNDERGROUND ELECTRIC
- DISTRIBUTION OVERHEAD
- ELECTRIC SERVICE
- FIBER OPTIC
- TELEPHONE
- UNDERGROUND GAS
- TREE/BRUSH LINE
- DECIDUOUS TREE
- CONIFEROUS TREE
- ELECTRICAL BOX
- (R) REMOVE
- (S) SAVE

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or MISS DIG @ 1-800-482-7171

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JAM	DAS	DAS					03/28/22	REVISED PER TWP
JAM	DAS	DAS					03/04/22	SITE PLAN SUBMITTAL

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DESIGN APPROVAL D. SCOTT DATE MAR 2022
ENGINEER APPROVAL S. TESSMAR DATE MAR 2022

ROWE PROFESSIONAL SERVICES COMPANY

Consumers Energy
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GEO-SPATIAL & GAS ASSET MANAGEMENT
JACKSON, MI

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SCALE 1" = 10'
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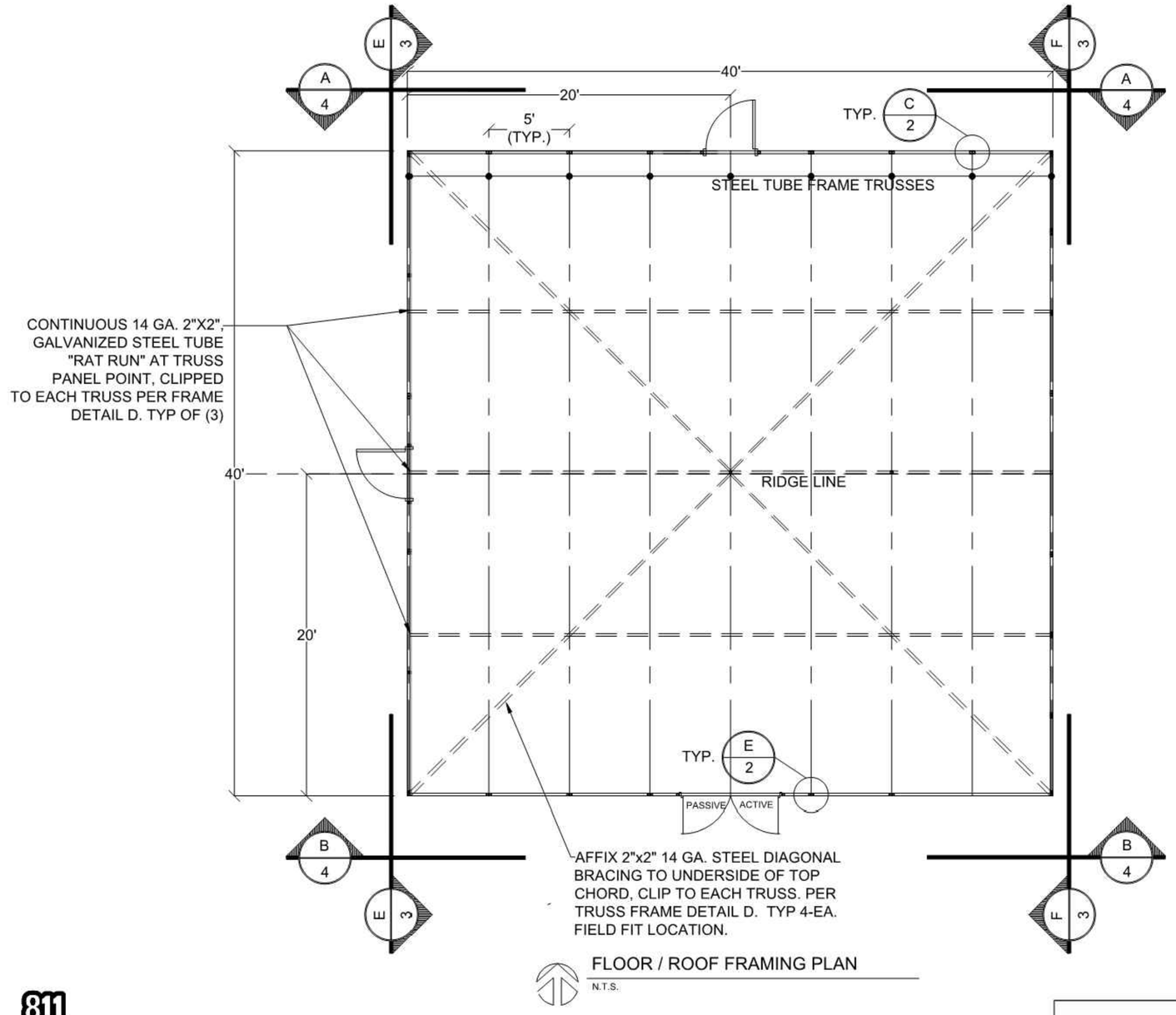
KALAMAZOO / NAZARETH CITY GATE 2022 RECONSTRUCTION

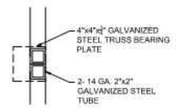
EXISTING SURVEY & REMOVALS

FIELD AREA:
PROJECT # 21C0265
STA. NO. K-2
DRAWING NO. C-1324-PMT
SHEET 7
REV

PLOT @

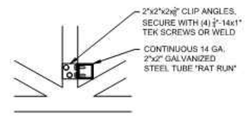


FLOOR / ROOF FRAMING PLAN
N.T.S.

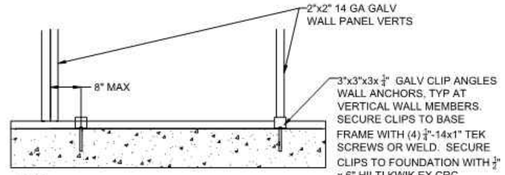


SECURE TRUSSES TO BEARING PLATES WITH 2-2"x2"x2x¼" CLIP ANGLES, AND (4) ¾"-14x1" TEK SCREWS (EACH SIDE) OR WELD

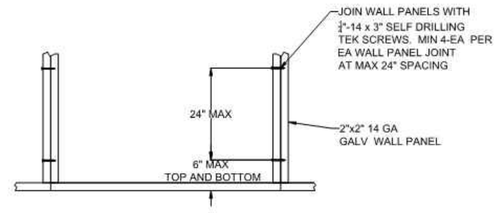
C 2 FRAME DETAIL
N.T.S.



D 3 FRAME DETAIL
N.T.S.



E 2 BUILDING ANCHORAGE DETAIL
N.T.S.



WALL FRAME CONNECTION DETAIL
N.T.S.

STATE OF MICHIGAN
TIMOTHY C. WELLERT
ENGINEER
6201058052
2-27-2022
LICENSED PROFESSIONAL ENGINEER

Know what's below. Call before you dig.

NORTHERN INDUSTRIAL CONSTRUCTION INC.	TITLE: KALAMAZOO-NAZARETH BUILDING FRAMING PLAN	DESIGNED: T.KOWALEWSKY	
		APPROVED: T.WELLERT	
	CLIENT DWG: C-1629-VEN.002	DWG: SHEET 2 OF 6	

REV.	DATE	DESCRIPTION	BY	APP.
B0	02/07/2022	APPROVED FOR CONSTRUCTION	TK	TCW

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DRAWN J. MILLER DATE MAR 2022
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DESIGNED J. MILLER DATE MAR 2022
DESIGN APPROVAL D. SCOTT DATE MAR 2022
ENGINEER APPROVAL S. TESSMAR DATE MAR 2022

ROWE PROFESSIONAL SERVICES COMPANY

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JACKSON, MI

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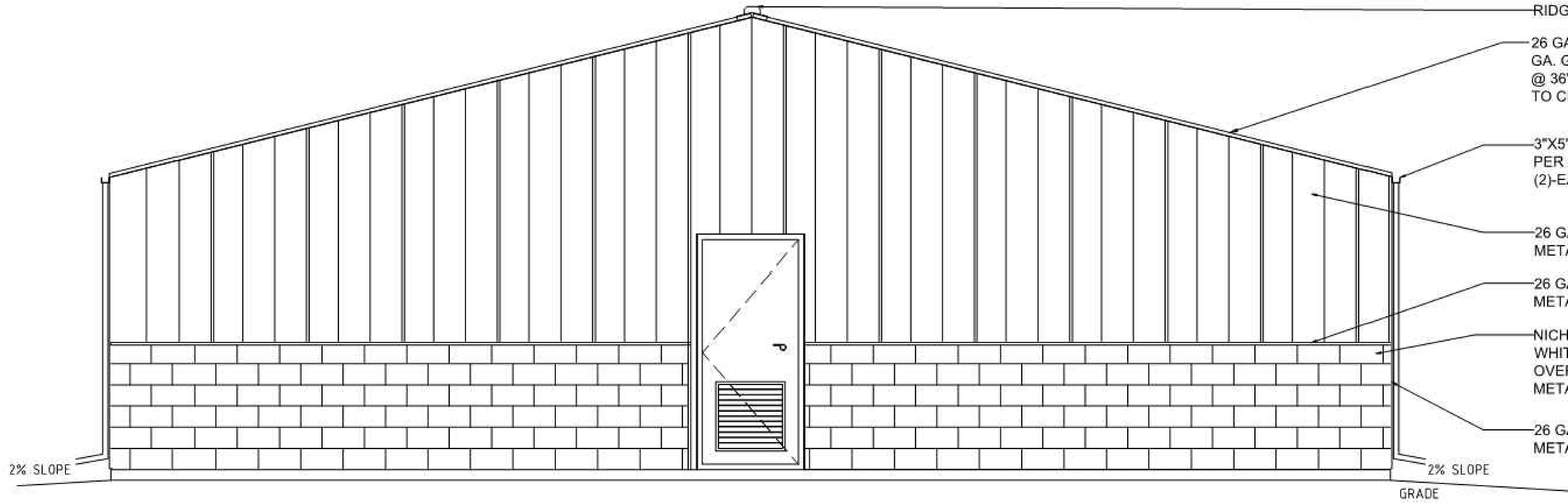
KALAMAZOO / NAZARETH CITY GATE
2022 RECONSTRUCTION

FRAMING PLAN

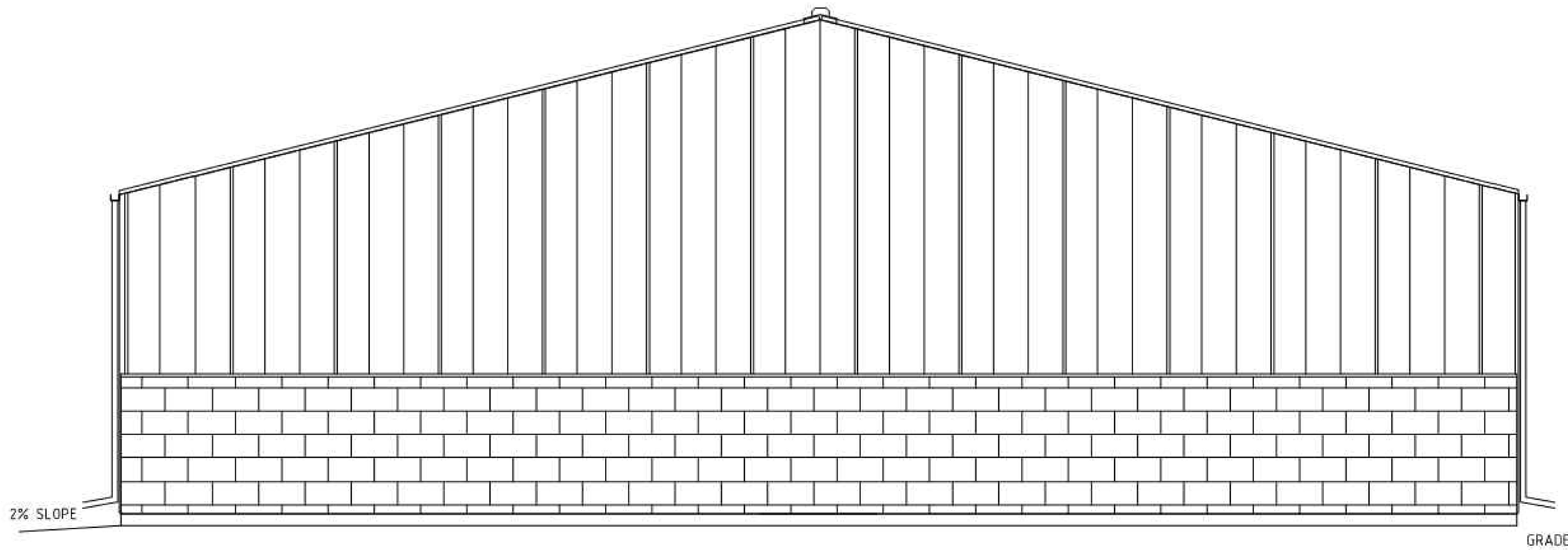
FIELD AREA:
PROJECT # 21C0265
STA. NO. K-2
DRAWING NO. C-1324-SAD
SHEET 8
REV

PLOT 8



WEST EXTERIOR

N.T.S.



EAST EXTERIOR

N.T.S.

STATE OF MICHIGAN
TIMOTHY C. WELLERT
ENGINEER
6201058052
2-27-2022
LICENSED PROFESSIONAL ENGINEER

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NORTHERN INDUSTRIAL CONSTRUCTION INC.	TITLE KALAMAZOO-NAZARETH BUILDING ARCHITECTURAL	DESIGNED T.KOWALEWSKY					
		APPROVED T.WELLERT					
	CLIENT DWG. C-1629-VEN.005	DWG. SHEET 5 OF 6	00	02/07/2022	APPROVED FOR CONSTRUCTION	TK	TCW
			REV.	DATE	DESCRIPTION	BY	APP

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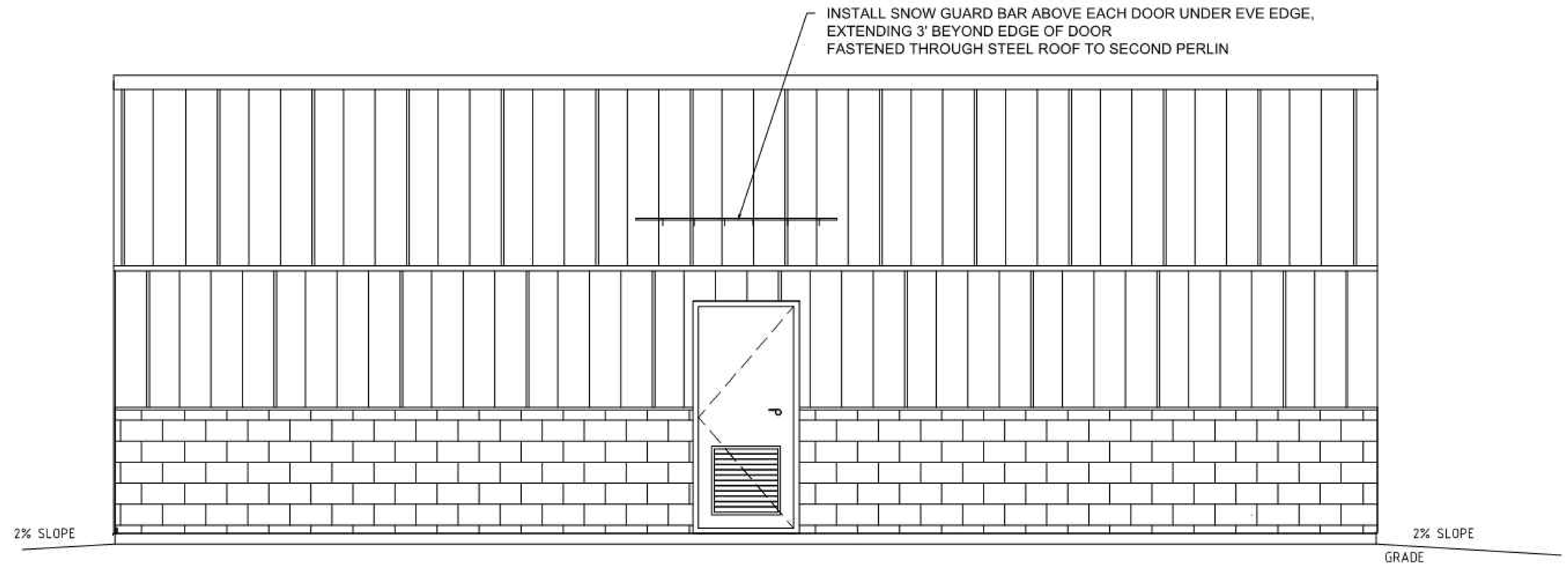
KALAMAZOO / NAZARETH CITY GATE 2022 RECONSTRUCTION

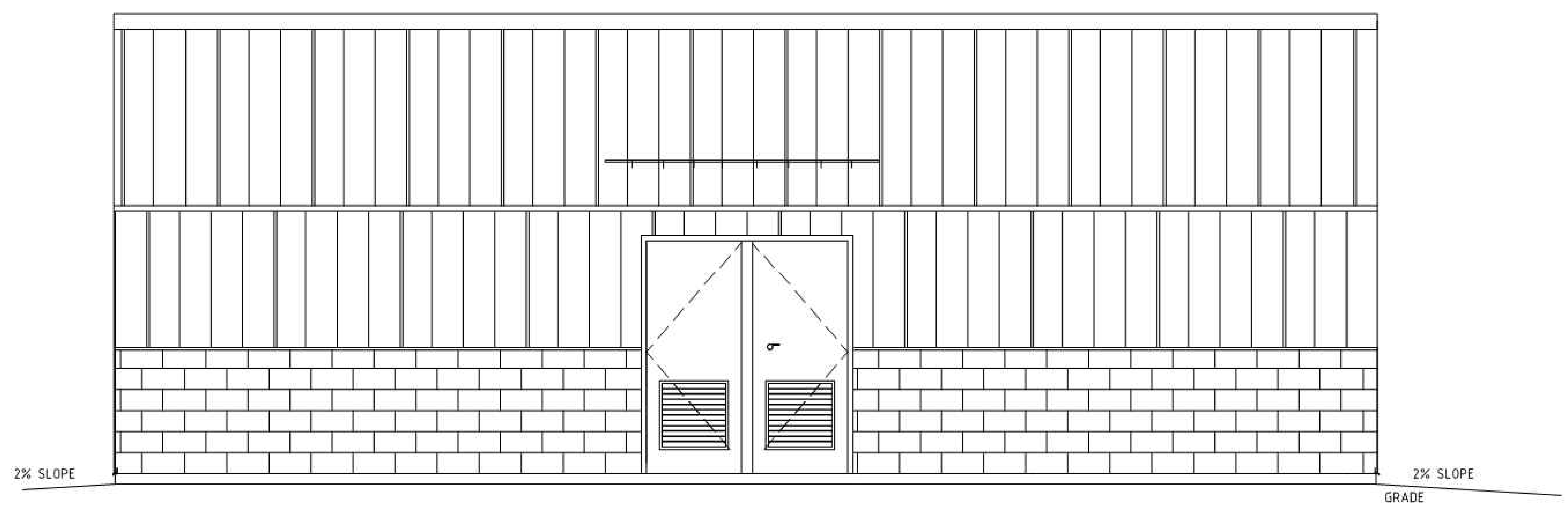
ARCHITECTURAL ELEVATIONS

FIELD AREA:
PROJECT # 21C0265
STA. NO. K-2
DRAWING NO. C-1324-SAD
SHEET 9
REV
PLOT @



NORTH EXTERIOR

N.T.S.



SOUTH EXTERIOR

N.T.S.

STATE OF MICHIGAN
TIMOTHY C. WELLERT
ENGINEER
6201058052
2-27-2022
LICENSED PROFESSIONAL ENGINEER

NORTHERN INDUSTRIAL CONSTRUCTION INC.	TITLE: KALAMAZOO-NAZARETH BUILDING ARCHITECTURAL	DESIGNED: T.KOWALEWSKY
		APPROVED: T.WELLERT
	CLIENT DWG: C-1629-VEN.006	DWG: SHEET 6 OF 6

REV.	DATE	DESCRIPTION	BY	APP
B0	02/27/2022	APPROVED FOR CONSTRUCTION	TK	TCW

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KALAMAZOO / NAZARETH CITY GATE 2022 RECONSTRUCTION

ARCHITECTURAL ELEVATIONS

FIELD AREA:

PROJECT # 21C0265

STA. NO. K-2

DRAWING NO. C-1324-SAD

SHEET 10

REV

Kalamazoo - Nazareth City Gate
Kalamazoo Township / Kalamazoo County

ROWE PROFESSIONAL SERVICES COMPANY

Storm Water Calculations
March 28, 2022

1. Stormwater Background

The existing site contains a 286 square foot building with the remainder of the site covered in turf. The site slopes from the south property line to the north right-of-way at Francis Avenue and falls approximately six feet in 88 lineal feet. The existing stormwater that does not infiltrate the site flows north to the Francis Avenue right-of-way along a "gravel" shoulder area used for occasional Consumers Energy parking and slopes east along the south side of Francis Avenue to an existing low area / leaching area near the northeast corner of the site.

The proposed plan will excavate into the south portion of the site utilizing a segmented block wall to reduce the site's cross-slope, south to north to slow the runoff rate. The valves located near the southwest corner of the site must remain at the current elevations due to existing pipe cover. A 40' x 40' building will be erected along with concrete paved entrance and drives. The proposed concrete will have a snow-melt system, as the site is not large enough to accommodate snow storage. The remainder of the site will have a six-inch layer of MDOT 6AA crushed limestone surfacing (possessing a void ratio of approximately forty percent for potential storm water storage). The improvements will also include developing an infiltration basin directly north of the property within the Francis Avenue right-of-way.

Consumer Energy had four soil borings completed and analyzed for the proposed building. The soils report demonstrates that sand dominates the site. The USDA's Web Soil Survey also shows the prevalence of sand soils. With the existing soils, the proposed crushed limestone surfacing, and proposed infiltration area, it is our belief that the proposed changes will not increase runoff to the current drainage area. Complete drainage calculations are provided below.

2. Drainage Calculations

Due to the small footprint of this site and the short time of concentration, it was agreed to detain / retain three inches of runoff across the entire site. Some of this runoff will be retained within the voids of the proposed limestone surface and the rest will be retained within an infiltration basin to be located within the Francis Avenue right of way.

<u>Site Area</u>
Pervious (limestone surface & right of way) = 5,601 sft
Impervious (building / concrete) = 5,040 sft

Required Volume 10,641 sft total area @ 3" storm = 2,660 cft

Percolation

Assume percolation rate of 1” per hour over gravel area and detention area

Gravel area = 5,601 sft
5,601 sft x 1’/12” = 466.8 cft (Percolation)

Stone Storage

Limestone area = 4,741 sft x 6” 6AA @ 40% void = 948.2 cft
Limestone area capacity = 948.2 cft

2,660 cft – (466.8 cft + 948.2 cft) = 1,245 cft required storage

Infiltration Area

Use an infiltration area of 50’ x 8’ x 6’ deep, but place 40 lft of 48” diameter pipe within the area.

Volume of 48” Pipe = 12.56 cft / lft
40 lft x 12.56 cft = 502.4 cft

Stone Volume
50’ x 8’ x 6’ = 2,400 cft
2,400 cft – 502.4 cft = 1,897.6 x .4 (voids) = 759 cft

Total Storage Provided in Infiltration Basin

502.4 cft + 759 cft = 1,261.4 cft > 1,245 cft Required

Kalamazoo - Nazareth City Gate
Kalamazoo Township / Kalamazoo County

ROWE PROFESSIONAL SERVICES COMPANY

Project Narrative – Updated March 28, 2022

1. Existing Site Information – South Side of Francis Ave, East Side of Nazareth Road

Address	1838 Nazareth Road
Parcel #	#06-12-435-490
Current Zoning:	R-2 Single and Two Family
Lot Size:	0.20 Acres
Current Use:	City Gate / Valve Site
Setbacks	Front Yard – 25' Required / 10' Provided – Variance Side Yards – 5' Required / 10' Provided Rear Yard – 35' Required / 38' Provided (Building)
Maximum Height	35' Allowable / 9' Eve – 13' OA Provided (12/3 slope)
Maximum Coverage	25% Allowable – 18% Provided
Surrounding Area Use	R-2 & RM-1 (Single & Two Family & Multiple Family Residential Density)

2. Project Overview

Consumers Energy owns and operates a natural gas city gate facility that is located on the east side of Nazareth Street just south of Francis Street. This site is 0.2 acres and is used to distribute natural gas from the transmission system to the local neighborhoods. The facility reduces the gas pressure from the transmission system to a lower pressure that can be utilized by the surrounding neighborhoods. Part of this process involves filtering the gas to remove sediment and moisture and heating the gas as the pressure is reduced to prevent frost build up in the pipes / valves. The proposed system is predominantly automated and requires minimal onsite labor to operate. A comprehensive remote telemetry system will be incorporated into the improvements.

The improvements will include the following:

a. Removal of the existing fencing.
b. Removal of existing gravel surface to facilitate piping installation. Limited sidewalk removal along Nazareth to connect to existing piping.
c. Removal of some existing equipment and piping onsite.
d. Install new piping, valves, filter separator and heater.
e. Construct new 40' x 40' x 13' steel sided building.
f. No water or sewer in the building.
g. Replace / regrade gravel surface over piping.
h. Install new concrete driveway / turn around. Concrete will include a snow melt system to limit snow plowing requirements.
i. Improve drive opening with curb and gutter.

j. Install fencing to enclose site. Provide 20' slide gate. Fencing along south and east sides will be 8' white vinyl privacy fence. Fencing along west and north sides will be 7' chain link with 3 strands of barbed wire.
k. The site will be graded to provide a walkable yard. A 42" +/- high retaining wall will be implemented to attain the desired yard grades.
l. Limited lighting will be switch activated for onsite work.
m. Litter receptacles will not be provided – litter will be removed daily.
n. Site is only occupied for maintenance purposes. No defined parking spaces are proposed.
o. No public utilities except for electrical.

3. Site Specific Items

I. *Number of Employees onsite* – The proposed improvements will allow Consumers to remotely monitor / operate the facility using the remote telemetry unit. The site will not be regularly occupied by employees. Maintenance staff will periodically visit the site to maintain equipment. This generally occurs on a weekly basis. A normal site visit will include one employee driving one vehicle. Additional employees may be onsite to service equipment. There is space for parking up to three vehicles onsite which is sufficient for the employees working onsite.

II. *Parking Spaces Provided* – Due to the limited use of the facility, parking spaces are not delineated. Employees performing maintenance will bring work vehicles with them and park close to the area requiring maintenance to allow access to tools, etc. There is ample area available onsite to accommodate up to three vehicles.

III. *Tree Clearing* – The existing brush area in the northeast corner of the site will be cleared.

IV. *Fencing Upgrades* – The existing fencing will be replaced with new fencing. As an upgrade to the site, Consumers will be installing privacy fencing along the south and east sides. This will provide screening to the adjacent residential properties. The fencing along the west and north sides will be chain link with barbed wire for security reasons.

V. *Landscaping* – No landscaping is proposed for this site. The privacy fence along the south and east sides will provide screening to the residential areas. The unmanned nature of this site depends upon drive by reporting for both security and potential mechanical issues. Clear site lines along the road frontage are desired to promote visibility within the site.

VI. *Building Upgrades* – The standard building material for similar facilities is steel siding with steel roofing. In an effort to blend in with the adjacent homes, Consumers has upgraded the proposed building to include a brick wainscot along the lower half of the building.

VII. *Above Grade Equipment* – As mentioned previously, the site will include an exterior natural gas heater, filter / separator unit, and above grade valves. The heater and filter / separator will be above grade. These units will be similar to the existing equipment located onsite.

4. Stormwater

The existing site contains a 286 square foot building with the remainder of the site covered in turf. The site slopes from the south property line to the north right-of-way at Francis Avenue and falls approximately six feet in 88 lineal feet. The existing stormwater that does not infiltrate the site flows north to the Francis Avenue right-of-way along a "gravel" shoulder area used for occasional Consumers Energy parking and slopes east along the south side of Francis Avenue to a "potential" leaching/catch basin area near the northeast corner of the site.

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5. Other Review Agencies

Road Commission of Kalamazoo County (RCKC) – The RCKC was contacted to discuss the specifics of the proposed entrance drive layout. The Plans reflect the RCKC's initial input and have been submitted to RCKC for review.

Kalamazoo County Drain Commissioner (KCDC) – The plans have been submitted to the KCDC for review of storm water, and soil erosion and sedimentation control

Michigan Department of Transportation (MDOT) – MDOT has no jurisdiction in the project area.

Michigan Department of Environment (MDEQ) – There are no wetlands or floodplains within the vicinity of the project.

5. Estimated Construction Schedule

Start Construction – May 2, 2022
Complete Construction – October 28, 2022

Kalamazoo - Nazareth City Gate
Kalamazoo Township / Kalamazoo County

Landscaping Exemption Request

March 28, 2022

No landscaping is proposed for this site. Consumers Energy acknowledges that the Kalamazoo Township Zoning Ordinance requires a landscaping plan for each site plan. This particular site has been used and will continue to be used as a natural gas regulator station which is an essential services use. This site, which currently provides natural gas service to the surrounding community, is very tight and landlocked by frontage on two roads. As a natural gas regulator site, there are use restrictions that are placed upon this site by both Consumers Energy and the Michigan Public Service Commission which regulates these sites across Michigan.

Plant material / Landscaping, which is considered combustible fuel, must remain a safe distance from all equipment to be located onsite. Consumers Energy operation polices prohibit the installation of plant material within the fenced area. Additionally, trees cannot be planted over natural gas pipelines for the same reason that municipalities do not allow trees to be planted above water mains and sewers. At most regulator stations, Consumers Energy will install landscaping outside of the fenced area to buffer areas that are adjacent to residential areas. Due to the small footprint of this site, Consumers is proposing to provide a solid vinyl privacy fence in lieu of plant material along property lines adjacent to residential areas.

Typically, additional landscaping will be provided along street frontage. However, this site is impacted by the location of the existing valves which will remain in place. The fence along Nazareth Road must be installed along the property line to enclose the existing valves. There is not adequate room to plant landscaping along Nazareth Road. The proposed sidewalk along Francis Street does not allow for landscaping to be installed within the France Avenue right of way.

Consumers Energy is requesting that the planning commission consider waving the requirement for a landscape plan for this site due to the essential service nature of the facility. As a compromise, Consumers Energy is willing to plant street trees in the right of way between the sidewalk and curb in locations determined by the township. Consumers would also be willing to work with the township to install the required landscaping at an alternate site. These options can be further discussed at the planning commission meeting.